OECD Development Pathways

Multi-dimensional Review of Myanmar

VOLUME 1. INITIAL ASSESSMENT

OECD

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Foreword

Economic growth is just one facet of development. Policy makers are focused on ensuring that their country's development path is sustainable and that the lives of citizens improve, which calls for the need to reconcile economic, social and environmental objectives.

OECD Development Pathways *is a new series that looks at multiple development objectives beyond an exclusive focus on growth. It recognises that well-being is part of development and aims to help developing countries to identify binding constraints to more equitable and sustainable growth through undertaking a multi-dimensional country review (MDCR). Governments trying to achieve economic, social and environmental objectives need to understand the constraints they face and to develop comprehensive and well-sequenced strategies for reform. MDCRs take a cross-cutting, rather than a sectoral perspective, which allows for the discussion of policy interactions.*

Myanmar is the first country to undertake a multi-dimensional review. It comes at an opportune moment in the country's history as it begins to stake out the first steps of a new development path. While the recommendations in this report are intended primarily to support public policy action by Myanmar's national authorities, the findings will also be useful to civil society and international donors to inform their development co-operation efforts with Myanmar as well as other actors involved in development.

The MDCRs are composed of three distinct phases: diagnosis, in-depth analysis of the binding constraints, and implementation. This phased approach allows for a progressive learning process about the country's specific challenges and opportunities that culminates in a final synthesis report. The present diagnostic report is the outcome of the first phase of the MDCR of Myanmar. Analytical work is based on all available statistics on Myanmar, including macroeconomic and structural data, at national, sectoral and micro levels, using both domestic and international sources. The analysis is also based on forecasts and indicators constructed in-house. The scarcity of available data represents a real challenge for Myanmar, and recommendations for improvements to the country's statistical system are covered in the report. Therefore, the statistical analysis is complemented and enriched by a series of study missions to Myanmar and structured questionnaires, discussions with and comments from national authorities, private sector representatives and academia.

The initial diagnosis of development outcomes and drivers serves to identify the binding constraints to development. In particular, the reviews investigate and identify binding constraints to broad-based development in terms of deficiencies in one or more of four types of capital: human capital, physical capital, institutional capital and social capital. Human capital is determined by the availability of the skills needed by the labour market. Physical capital includes business capital used in production, real estate and various types of infrastructure such as roads, railways and ports, but also energy and water supply and telecommunications. Institutional capital comprises the institutional structure, its actors, their organisations and the legal and regulatory framework governing public and private sector activities. Other binding constraints may be caused by the lack of social capital, the most important elements of which are trust, accountability and voice, as well as transparency.

The diagnosis has identified limits in institutional capital accumulation as posing a particularly important binding constraint to Myanmar's development. Social capital also needs to be built up. On the basis of solid institutional and social capital, a rapid accumulation of the needed human and physical capital can be secured.

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Acronyms and abbreviations

ADB	Asian Development Bank
AFPFL	Anti-Fascist People's Freedom League
ASEAN	Association of Southeast Asian Nations
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BSPP	Burma Socialist Programme Party
CAL	Certification and labelling
CBM	Central Bank of Myanmar
CDMA	Code Division Multiple Access
CF	Community forest
CIs	Command instruments
CLMV countries	Cambodia, Lao PDR, Myanmar and Viet Nam
CPI	Consumer Price Index
CSO	Central Statistical Organization (of Myanmar)
CSOs	Civil society organisations
CVT	Centre for Vocational Training
DICA	Directorate of Investment and Company Administration
EIA	Environmental Impact Assessments
ERIA	Economic Research Institute for ASEAN and East Asia
ETI	Environmental tax instruments
FAO	Food and Agriculture Organization
FDI	Foreign direct investment
FESR	Framework for Economic and Social Reforms
FUG	Forest user groups
GDDS	General Data Dissemination System
GER	Gross enrolment ratio
GDP	Gross domestic product
GII	Gender Inequality Index
GMS	Greater Mekong Sub-region
GNI	Gross national income
GWh	Gigawatt-hour
ICT	Information and communications technology
IDPs	Internally Displaced Persons
IEA	International Energy Agency
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
IHLCA	Integrated Household and Living Conditions Assessment
JAT	Junior Assistant Teachers
JETRO	Japan External Trade Organisation
KBZ	Kanbawza Bank
KMT	Kuomintang
KNU	Karen National Union
LDC	Least developed country
LEC	Law on Environmental Conservation
MBIs	Market-based instruments
MDCR	Multi-dimensional Country Review

MDRI	Myanmar Development Resources Institute
MEC	Myanmar Economic Corporation
MOECAF	Ministry of Environmental Conservation and Forests
MOGE	Myanmar Oil and Gas Enterprise
MNPED	Ministry for National Planning and Economic Development
MW	Megawatts
NCCE	National Coordinating Commission for the Environment
NCEA	National Commission on Environmental Affairs
NCSD	National Council on Sustainable Development
NECC	National Environmental Conservation Committee
NEPL	National Environmental Policy Law
NGO	Non-governmental organisation
NLD	National League for Democracy
NPL	Non-performing loan
NSDS	National Strategy for the Development of Statistics
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
PARIS21	Partnership in Statistics for Development in the 21st Century
PAS	Protected Area System
PAT	Primary Assistant Teachers
PES	Payments for ecosystem services
PISA	Programme for International Student Assessment
PPP	Purchasing Power Parity
PVO	People's Volunteer Organisation
SAARC	South Asian Association for Regional Cooperation
SAT	Senior Assistant Teacher
SCOUHP	Supreme Council of the United Hills Peoples
SDDS	Special Data Dissemination System
SEA	Strategic Environmental Assessments
SEZ	Special Economic Zone
SIGI	Social Institutions and Gender Index
SLORC	State Law and Order Restoration Council
SOE	State-owned enterprise
SMEs	Small and medium-sized enterprises
SMIDB	Small and Medium Industrial Development Bank
SPDC	State Peace and Development Council
SWIFT	Society for Worldwide Interbank Financial Telecommunication
SWM	Solid waste management
TRIMS	Trade-related investment measures
UMEH	Union of Myanmar Economic Holdings Ltd.
UMFCCI	Union of Myanmar Federation of Chambers of Commerce and Industry
UN	United Nations
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
WFP	World Food Programme
WHO	World Health Organization
WTO	World Trade Organization

Editorial

Transitions are complex phenomena which require astute policy making backed up by unwavering political will. The progress made in Myanmar since the start of its transition process in 2011 has been remarkable, particularly given the country's unique challenge of a "triple transition". In the political sphere, the country has moved from military rule to multi-party democracy; economic reforms aim to transform a largely centrally planned economy to a market-based one; and finally, negotiated ceasefires in the on-going peace process have halted several of the prolonged conflicts in the country's border areas.

Two years in, the reforms in Myanmar continue to proceed at breathtaking speed. A raft of new laws has been passed and more are being drafted and debated in parliament. As the diagnosis in this initial assessment of Myanmar shows, seizing this momentum will be imperative. The country's increasing population in the next couple of decades can provide a demographic dividend which needs to be reaped to boost the potential of the economy. After that, the population will begin ageing. If the momentum for development is not seized now, Myanmar risks getting old before the incomes and living standards of its people can significantly improve.

We now know that there is no single "model" of development and Myanmar will chart its own path, one which capitalises on its strengths and meets the aspirations of its people. Experience from other countries which have undergone transitions shows that transition processes are shaped by a country's socio-political conditions and human and physical endowments. Policy prescriptions therefore need to be tailored; general prescriptions such as price and trade liberalisation, macroeconomic stabilisation and privatisation, while essential, do not result in the same policy outcomes in different countries. Just a few years ago, this was not the prevailing attitude, but much has been learned since then which can benefit policy makers and practitioners working for Myanmar's development today. In turn, the experience of Myanmar will provide us with even more lessons which will enrich our understanding of transition and development.

Over the past two years, the OECD has carried out a deep reflection on the challenges of development and how the Organisation can best meet the needs of policy makers and ultimately the citizens they serve, as part of an OECD Strategy on Development. The Strategy called upon the OECD to adapt its analytical framework, policy tools and instruments in order to enhance its contribution to global development. The *OECD Development Pathways* are one response to this demand. These reviews embody a different approach to development, which favours the careful diagnosis of national conditions over broad economic policy prescriptions. They also build on the wealth of policy experience from OECD countries, many of which themselves have undergone political and economic transition, and, in the case of the *Multi-dimensional Review of Myanmar*, benefit from the growing body of OECD work on Southeast Asia.

Mario Pezzini Director OECD Development Centre	Martine Durand Chief Statistician and Director OECD Statistics Directorate	Pier Carlo Padoan Deputy Secretary-General and Chief Economist of the OECD

Facts and figures

Official name:

Republic of the Union of Myanmar

Population:

59.13 million (est.)

The latest population estimates from the government are based on the last population census (which was held in 1983), the 1991 Myanmar Population Changes and Fertility survey and the 2001 Fertility and Reproductive Health survey. The World Development Indicators' estimates for Myanmar's population are much lower (48.34 million in 2011) and the IMF World Economic Outlook's estimates are slightly higher (62.42 million in 2011). Lower estimates are said to account for the elevated mortality rates due to HIV/AIDS in the country which may not be captured in official figures.

Geography:

Myanmar's central plains are ringed by high mountain ranges in the north and west and the Shan highlands to the east. To the south, the delta and valley regions of the Ayeyarwady and Sittaung rivers are where most of the country's fertile, cultivable land is concentrated. Offshore there are many large islands and hundreds of small islands.

Climate:

Myanmar has a tropical monsoon climate in the lowlands with rainy, hot, humid summers (June to September) and milder, drier winters from December to April. The climate in the highlands varies depending on elevation, ranging from subtropical temperate climate at lower elevations through to an arctic climate at the highest elevations. Some areas in the dry zone of north-central Myanmar receive less than 700 mm of rainfall a year whereas southern coastal areas receive over 5 000 mm of rainfall annually.

Land area:

676 578 km^2

Myanmar is the largest country in mainland Southeast Asia, spanning 936 km from east to west and 2 051 km from north to south. It is twice the size of Viet Nam and about a quarter bigger than Thailand.

International borders:

Bangladesh (193 km), India (1 463 km), China (2 185 km), Lao PDR (235 km), Thailand (1 800 km).

Total land borders:

5 876 km

Total coastline:

1 930 km

The coastline runs from the Bangladesh border in the northwest to the Malay Peninsula and Thailand in the southeast.

Administrative divisions:

There are twenty-one administrative subdivisions, including seven states (Chin, Kachin, Kayah, Kayin, Mon, Rakhine, Shan), seven regions (Ayeyarwady, Bago, Magway, Mandalay, Sagaing, Taninthayi, Yangon), five self-administered zones, one self-administered division and the Union Territory of Nay Pyi Taw. Myanmar's states and regions are sub-divided into districts, then townships, then towns, wards (urban) and village tracts (rural).

Administrative regions/states of Myanmar

Currency:

Kyat or Myanmar kyat (MMK).

Religions:

Buddhist (89.4%), Christian (4.9%), Muslim (3.9%), Animist (1.2%) and Hindu (0.5%).

Ethnic groups:

There are 135 recognised ethnic groups in the country; the major groups are Bamar (69%), Shan (8.5%), Kayin (6.2%), Rakhine (4.5%), Mon (2.4%), Chin (2.2%), Kachin (1.4%), Kayah (0.4%), other indigenous (0.1%) and Foreign, including mixed Bamar and foreign (5.3%).

Languages:

The Myanmar language is the official language but other indigenous languages are spoken in the country's ethnic areas.

Form of government:

Parliamentary government since March 2011.

Capital city:

Nay Pyi Taw

Executive summary

Myanmar boasts numerous assets including fertile land that is rich in minerals and hydrocarbons, forests and hydro-resources, and a relatively young population. By coupling these assets with its favourable geo-strategic location in a dynamic region, Myanmar can establish a multi-pronged strategy for sustained, rapid growth and development based on agriculture, resource extraction, manufacturing and services. Yet time is of the essence: Myanmar's now comparatively young population will start ageing in the next two decades. If the momentum for development created by the country's opening and internal peace process is not seized, Myanmar could get old before it gets rich.

The goal is growth that is stable, sustainable and equitable in its opportunities

Recent economic growth in Myanmar has been relatively low for its level of income. The OECD's medium-term growth forecasts indicate that without structural change the economy can grow at an average of 6.3% over 2013-17, somewhat below the government's 7.7% target for between now and 2015. To achieve this goal, and also set the foundations for solid and sustainable development, short-term actions for growth and poverty reduction should be appropriately sequenced with institutional change initiatives that promote democratic consolidation, systematic increases in productivity and equitable distribution of opportunities and income.

The resource sector can contribute to growth, but for stable growth that benefits the whole population several job-creating sectors need to take off. Agriculture, as today's major provider of jobs and domestic output, will continue to play a crucial role in the economy, but with mechanisation and productivity increases, its employment is expected to shrink. Investment in the now under-developed manufacturing and services sectors will be essential to creating jobs and raising incomes. The expansion of these sectors will be favoured by the country's abundant low-cost labour but improved physical infrastructure and institutional frameworks for private business sector development are vital. To take advantage of these opportunities, in the short term the pragmatic identification of a limited set of policy initiatives may better trigger investment. Special attention should be given to attracting foreign investment, special economic zones, optimising the contribution of public enterprises to economic growth, and setting the right conditions for the development of small enterprises. These measures should be subsequently accompanied by long-term oriented structural reforms.

Policies should aim for more than aggregate growth, to ensure that development is stable and sustainable. Different trajectories of growth may have similar impacts on sustainability and equity. In fact, equally important, development needs to be inclusive and to provide equitable opportunities for the whole population if the social consensus critical to the pursuit of development policies is to be maintained. Myanmar needs to address the urgent challenges of extreme poverty and unequal distribution of public services. The expeditious implementation of reforms in this direction is crucial to consolidate a base of popular support to the reform process, opening political space

to address the complex endeavours such as consolidating the political transition, reducing ethnic tensions or overcoming regional disparities. The success of Myanmar's development will also be measured by the improvements it achieves in broader measures of well-being, in terms of health, security, and the perceived ability of people to participate in decisions affecting their lives.

Institutional and social capital will be vital to achieving stable and sustainable growth …

The lack of institutional and social capital is the key constraint to Myanmar's development, even more pressing than its lack of human and physical capital. Whether Myanmar succeeds in achieving stable and sustainable growth will depend vitally on its success in developing the institutional and social capital necessary to maintain macroeconomic and financial stability, to ensure the rule of law, to realise environmentally sustainable development and to create an enabling environment for the private sector.

- Macroeconomic stability: Past episodes of macroeconomic instability have inhibited Myanmar's development, including a damaging banking crisis and bouts of near-hyper inflation. Three strands of policy are in need of reform: first, the financial system needs to be made more stable and more efficient to be ready to accommodate fund inflows and to channel these flows to best possible uses; second, a framework for monetary and exchange rate policy needs to be established, along with the necessary institutions and technical infrastructure, so as to be able to deal with economic shocks; and third, a framework for fiscal policy needs to be developed, particularly in order to boost revenues to finance much-needed expenditures in education and health. For these reforms to succeed, headway needs to be made with formalising the economy so as to extend the reach of the financial system and macroeconomic policies.
- Rule of law: The lack of rule of law in some parts of the country has impeded government provision of major public goods such as security, justice and other services. Moreover, the lack of rule of law has contributed to the rapid and often uncontrolled depletion of the nation's natural wealth. These problems reflect the fact that for much of the recent past, the law has not been supreme, allowing the government and powerful individuals to exercise arbitrary power, often at the expense of the public good. To establish the supremacy of the law, the effective separation of executive, legislative and judicial powers will be critical. The rule of law has been strengthened since the political changes in 2011. There are now fora for people to make their voices heard, the government is being held more accountable and transparency has been enhanced. However, a deeper involvement of the public in the discussion of laws and in the uncovering of unlawful behaviour is needed.
- Environmentally sustainable development: Myanmar's natural resources have been the mainstay of the economy and will continue to be important as the economy diversifies. However, the degradation of resources caused by population pressure and commercial demands needs to be stopped and, where possible, reversed. At the same time, Myanmar must prepare for the risks related to its anticipated industrialisation and urbanisation and the increased use of chemical fertilisers and pesticides to boost agricultural productivity. Climate change also needs to be factored into development plans as coastal and delta regions are likely to be affected by the increase in tidal variations in sea level and in the frequency and intensity of cyclones. This demands a stronger institutional framework and the incorporation of environmental considerations in all development policies, both overarching and sectoral.

- Enabling environment for private initiatives: The business sector will need to drive development but to do so the right institutional framework will have to be put in place. Although Myanmar has abundant low-cost labour, it has not managed to realise its potential. It has an estimated 2.6 small and medium-sized enterprises per 1 000 people, far lower than Thailand, let alone some more developed countries. Businesses are also largely informal: 83% of all businesses are in the informal sector. State-owned enterprises are afforded a great degree of freedom and economic privilege. Creating a level playing field for business will be a prerequisite for inclusive and sustainable development.

Institutional improvements will also be essential to address Myanmar's current lack of human and physical capital. While most of Myanmar's adult population have basic reading, writing and arithmetic skills and access to formal education has improved over the last 20 years, school dropouts at the primary level and low enrolment rates at the secondary level imply continued challenges in access to education. Issues related to the quality of education have been addressed through upgraded teacher training programmes and revised curricula, but better tools to measure students' attainment and teaching quality are needed. Myanmar has not yet accumulated the set of skills which may be demanded by the labour market in the years ahead. Stronger focus on vocational training and a higher proportion of tertiary graduates in education and health are essential.

In terms of physical capital, Myanmar's transport, energy and telecommunications infrastructure is in need of upgrading and expansion, but complex divisions of responsibility between ministries make developing cohesive strategies difficult. Just below 22% of the country's roads are paved and not all townships are reachable by road. Compared to its energy generation potential, Myanmar's installed capacity of around 3 500 megawatts is low. Power generation and distribution is a major problem: only 28% of the rural population has access to electricity. While some of its neighbours have seen an exponential growth in internet and mobile telephone use over recent years, Myanmar's has barely increased.

… and to ensuring that development is inclusive and provides equitable opportunities

To be sustainable, growth also needs to be more equitable and inclusive. Overall inequality, measured by the Gini index for consumption, at 0.38 does not appear to be especially high but this masks inequalities among different population segments. Nearly a quarter of the population live in poverty and poverty rates have not improved much with growth. Poverty is a major barrier and source of inequality in access to public services and goods such as education, healthcare and key infrastructure that will play a crucial role in improving living standards. Access to public services and infrastructure is also generally less for rural compared to urban residents, and for residents of some states/regions compared to others.

Growth across economic sectors has been uneven and has further contributed to unequal opportunities. Uneven growth has resulted in uneven development across regions, as drivers of growth (i.e. natural resources) are concentrated in specific regions. Interestingly, the country's periphery is relatively wealthier: the highest rates of household expenditure per capita are in the regions bordering Thailand, China and Bangladesh, as businesses in these areas take advantage of lower transportation costs in neighbouring countries and workers cross borders temporarily to find work at higher wages.

Equity and inclusion are particularly important in a country as ethnically diverse as Myanmar. The delicate balance between nation building and preserving cultural diversity will need to be struck if national unity is to be maintained and progress toward a multi-ethnic nation state sustained. A more effective form of federalism, whose precise form may need to be decided by experimentation, is likely to be required to successfully reconcile the legitimate demands of ethnic groups that their culture be respected with the needs of a coherent nation state. Ensuring peace and government control over the whole territory of the country and respecting the rights of minority ethnic groups are mutually reinforcing requirements for strengthening the legitimacy of the government.

Chapter 1

Myanmar at a crossroad

The following chapter provides an overview of the development opportunities and challenges facing Myanmar, framed in terms of the four capital stocks – physical, human, institutional and social – which underpin development. The discussion begins with an assessment of Myanmar's assets, notably its fertile land, natural resources, rich cultural heritage, abundant labour and strategic geographical location. It then examines the key challenges the country faces to ignite growth that is both sustainable and equitable and looks at factors determining the long-term potential of the economy, such as demographics. The chapter closes with an analysis of well-being in Myanmar, drawing on the OECD *How's Life?* framework, and compares indicators of well-being for Myanmar over time and in relation to other countries in the region or at similar levels of economic development.

Myanmar faces a crucial few years to make the appropriate policy choices as it paves the road for its long-term development. Fortunate to be endowed with a wealth of assets, the country can establish a multi-pronged development strategy based on agriculture, mining and extraction, manufacturing and services, an effort that this report hopes to facilitate. The internal peace process and renewed relations with major bi- and multi-lateral partners provides a strong basis for such a strategy. Myanmar can also turn its advantageous location to its benefit and regain or even exceed the importance it had played as a regional hub in earlier times. Situated between major growth poles and markets such as China and India, and in the proximity of the ASEAN[1] tigers, it can jump on the development bandwagon of the region, accelerating its catching up. The 'shifting wealth' process – the movement of the centre of gravity of the world economy from the North-Atlantic region eastwards and southwards, largely driven by growth in Asia – is also a favourable trend for Myanmar's take-off and integration into the global economy.

Fully harnessing the political and economic momentum of these domestic and international trends is fundamental for the country to embark on a stable and sustainable development path. The experiences with transition of other economies provide insights that may be useful for Myanmar's development (Box 1.1). Some important reforms have already been made and the political will to advance the reforms even further appears strong. The recent political changes since the transition to a civilian government in 2011 have opened doors all around the globe and have paved the way for establishing economic ties with bi- and multi-lateral organisations. An additional source of pressure on the government to deliver tangible results within a short time is the high expectations of the Myanmar people for improved living conditions and a more equitable distribution of the nation's wealth. To meet their expectations and include them in the nation-building process, the government needs to devise an inclusive political and economic agenda. This would include securing peace and setting it as a common goal for all, valuing political diversity and fostering dialogue, preserving ethnic identities and cultures, guaranteeing a decent livelihood, protecting private initiatives and fair returns and most importantly, distributing the proceeds from the nation's wealth on a sustainable and equitable basis, taking the interests of future generations into account.

Proper sequencing of government priorities and interventions underpins long-term development. A near-term objective for Myanmar should be to prepare its economy for deeper integration with other economies, in particular in ASEAN, which is envisaged to begin in 2015. This implies the need for boosting competitiveness in all sectors of the economy through diversification, productivity and efficiency growth and introducing a level playing field and competitive pressures in industries that were previously shielded from competition. Over the longer term, the challenge is to sustain a multi-dimensional development process involving steady improvements in living standards that are sustainable, equitable and inclusive and which also foster broader dimensions of development beyond material well-being, such as life satisfaction, trust and security.

This volume presents the results of the diagnostic phase of the multi-dimensional review of Myanmar. The ultimate goal of the review is to examine the interrelations among the multiple objectives of the development process, including not only aggregate growth but also sustainability, equity and other aspects of well-being on the basis of OECD tools and analytical frameworks, tailored to Myanmar's specific context. The focus in this first, diagnostic phase is on the key obstacles and constraints that will need to be overcome in achieving Myanmar's multiple development objectives. Sustained and rapid accumulation of physical capital along with improvements in technology and human capital will be essential to achieving Myanmar's development goals, but will not be sufficient by themselves. Even more important are: *institutional capital*, comprising the institutional

structures and arrangements by which the government carries out its objectives along with the legal and regulatory framework and laws that govern markets, businesses and other private actors; and *social capital*, comprising the institutions, relationships and norms that determine the extent and quality of the interactions among actors within a society. High quality institutional and social capital will be essential to the success of policies to achieve rapid, sustainable and inclusive growth and their improvement will be key to igniting a sustained development process. The goal is to achieve a virtuous cycle in which accumulation of institutional and social capital and sustainable and equitable growth become mutually reinforcing.

The first chapter of this volume provides an overview of the conditions and problems facing Myanmar as it begins its pursuit of a multi-pronged development strategy, emphasising the interactions among physical, human, institutional and social capital. The discussion begins with Myanmar's development advantages, notably its fertile land, natural resources, historical heritage, abundant labour and strategic geographical location. It then examines key challenges the country faces, focusing on ensuring that development is sustainable, that its benefits are shared by all segments of the society, and that broader dimensions of individual and social well-being, such as health, personal security and civic engagement are also promoted.

The following two chapters elaborate on these themes. Chapter 2 looks at the policies that are being undertaken and further challenges that will need to be overcome to develop the institutional and social capital necessary to achieve growth that is stable and sustainable over the longer term. These include the creation of frameworks to ensure macroeconomic and financial stability, legal and institutional arrangements to foster private-sector development, the strengthening of government institutions to ensure environmentally sustainable development and the accumulation of human capital and infrastructure. Chapter 3 then discusses the large gaps in economic and social opportunities and outcomes that now exist among the population and the possible policy options for alleviating them. Broader based growth achieved by developing manufacturing and services along with measures to improve access to public services will be needed to reduce poverty and create more equal opportunities. Achieving equitable and inclusive development will depend on developing the institutional and social capital for a multi-ethnic state that balances legitimate needs for local autonomy and respect for disparate cultures within a coherent national identity. Building trust among social groups and with the government will be equally critical to the attainment of this goal.

Capitalising on Myanmar's multi-faceted development opportunities

Few countries have the opportunity to establish a robust development strategy based on assets as abundant as those possessed by Myanmar, such as fertile land that is also rich in minerals, hydrocarbons, forests and hydro-resources, an ancient civilisation with historical sites of global importance and a relatively young population. So far, these assets have not been fully employed to realise Myanmar's development potential, nor have the benefits they have produced been shared among the population. Historically, the territory now encompassed by Myanmar had a thriving economy. It was considered an attractive place to live, resulting in people moving into the area from all directions. Its central location on trade routes as well as fertile land attracted new settlers from overpopulated areas or migrants seeking a secure place with possibilities to make a stable living. That is how, over the centuries, the area where Myanmar is now situated became a multi-nation area with flourishing economies and sophisticated cultures.

Box 1.1. **Learning from previous transitions**

As Myanmar embarks on its ambitious political and economic transition, it is worth reflecting on previous transition experiences undergone by other countries and the lessons learned from them.

Indonesia's successful transition from authoritarian regime to democratic political system provides an example from which Myanmar can draw inspiration. The years that followed the collapse of Suharto's "New Order" in 1998 saw a dramatic transformation of the country (Webber, 2006). Under the Suharto regime, power was concentrated in the president's hands, there was no effective separation of powers, political freedoms were limited, elections and the few political parties allowed to run in them were highly controlled and the military wielded extensive discretionary powers to intervene in the country's politics. Since 1998, Indonesia has experienced a series of legislative and presidential elections which have been deemed free and fair and passed peacefully, and there have been several changes of government. Greater press freedom, political freedom and a flourishing civil society are key features of the new Indonesia. Indonesia's military and police have also undergone significant reforms, responding to public demand as their human rights records came under public scrutiny. In fact, the separation of the police and the military was the first of twelve programmes for change in the Indonesian 'New Paradigm' strategy. This institutional reform helped gain public acceptance of law enforcement in the country.

Lessons can also be learned from the transition economies of Central and Eastern Europe and the former Soviet Union. In 2003, the OECD assessed the lessons learned from the work it has undertaken on these transition economies since the early 1990s.* This reflection exercise showed that initial expectations for a speedy transition from command economies to market-based economies in the countries of Central and Eastern Europe and the former Soviet Union were high. Yet with the benefit of hindsight, it is clear that the transformations were not smooth and linear but veered between the launch of bold reforms in some areas and stalled reforms in other areas. Experience showed that transition processes are shaped by initial conditions – the socio-political conditions, economic imbalances and human and physical resource endowments. The experience of Central and Eastern Europe and the former Soviet Union countries showed that general policy prescriptions – such as price and trade liberalisation, macroeconomic stabilisation and privatisation – did not result in the same policy outcomes in each country. Macroeconomic stabilisation can only be achieved if accompanied by progress in structural reforms. For example, government efforts to achieve and maintain budget discipline were undermined when state-owned enterprises faced weak budget constraints that led to higher quasi-fiscal deficits in the public sector. A major lesson learned was therefore that policy prescriptions should be tailored according to initial conditions. The combination, sequencing and timing of measures in policy implementation were also important. The time needed to implement different policies varies widely: some reforms can be implemented quickly with immediate impact while others require a longer timeframe and often institutional capacity building to be effective. Some policies, such as education, are inherently inter-generational and cannot be expected to deliver in a short time period. Maintaining political support for difficult reforms is essential, and this challenge is made harder when reforms are accompanied by social strains and resisted by vested interests. Reform processes need commitment beyond election cycles, which may fall short of the timeframe needed to see positive results.

Finally, the success of market-oriented policies ultimately rests on institutional transformation. Transition involves far more than the economy: creating democratic institutions and better governance, new social norms and values, stronger civil societies, press freedom, openness to private organisations and entrepreneurship and a network of regulators underpins this institutional transformation.

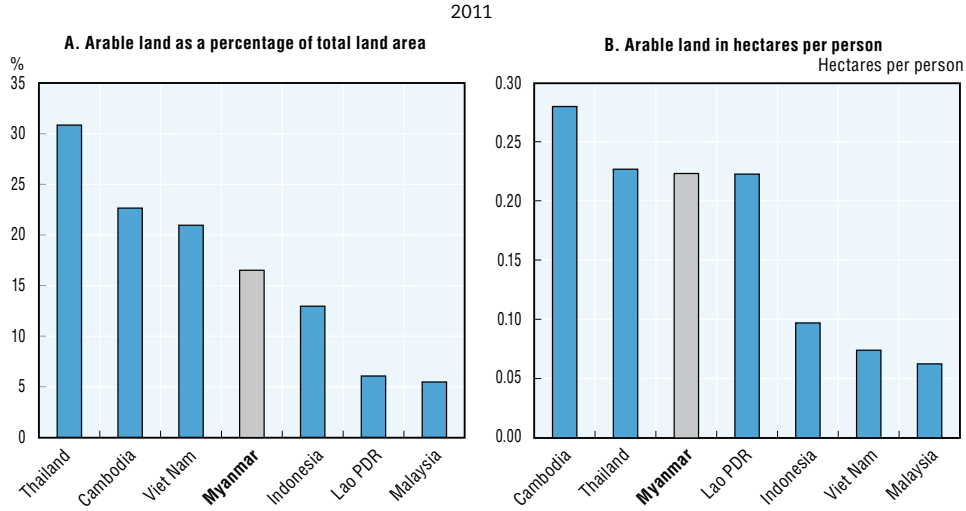
Note: *The lessons learned presented here are based on "The transition economies: The OECD's experience" [C(2003)165], produced for the OECD Council in 2003.

In the 1950s, notwithstanding decades of colonial rule, the newly-born country continued to develop rapidly and was seen as one of the most promising developing countries by the international community. However, economic and political stagnation in the fifty years since independence has left the potential so far unrealised and pushed the country into the low-income category in 1987 (see Annex A.1). The attempted liberalisation in the 1990s did not bring about widespread benefits but the 2011 opening has finally created a reform momentum to start reversing the deterioration of the economy, the divisions in the society and the degradation of the natural environment. At such a historical moment, the possibilities need to be explored to embark on a multi-pronged development path based on agricultural development, industrialisation using natural resources as a catalyst and the development of service industries.

Myanmar's rich agricultural resources made it the rice bowl of Asia a half century ago until its subsequent decline, and agriculture will clearly have to form one of the key pillars of its multi-pronged development strategy. Large areas of agricultural land are among Myanmar's major endowments. As a percentage of total land area, arable land is only slightly above 15%, roughly half of that of Thailand. However, given the sheer size of the country and low population density, the amount of arable land in per capita terms is large (Figure 1.1). In addition, Myanmar boasts large swathes of forested land. Nearly 47% of Myanmar's total land area is covered by forests, which account for nearly 40% of the total forested area of Southeast Asia. The country's forests contain 25 major commercially viable species, including 80% of the teak of the Southeast Asian region and extensive rosewood and ironwood tracts. Furthermore, Myanmar ranks 14th among all nations in water availability. Rich water resources provide diverse marine life and a basis for the fishing industry. Water is also the source of three-quarters of Myanmar's electricity. Myanmar has huge hydropower potential in its upland border regions, estimated to be more than 100 000 megawatts. While there are a couple of run-of-the-water plants, most hydropower plants require dams. The existing capacity of about 2 600 megawatts is projected to expand seven-fold by 2030, but this will still be only about a fifth of the estimated potential.

Figure 1.1. **Arable land is abundant, especially in per capita terms**

2011



Source: CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar and World Bank (2013a), *World Development Indicators* (database), http://databank.worldbank.org.

StatLink *http://dx.doi.org/10.1787/888932856969*

Minerals, hydrocarbons and other non-renewable natural resources are found in a diversity rarely seen elsewhere. The country's reserves of natural gas are estimated at 410 billion cubic feet onshore and 11 trillion offshore (37th highest in the world). Myanmar is also rich in coal, copper, gold, zinc, tungsten, precious stones, rare earth metals and other minerals. These abundant and diverse natural resources are likely to form another pillar of a multi-pronged development strategy, but the focus should shift to their sustainable exploitation so that future generations can reap the benefits of these assets. Myanmar's government will need to address how to: strengthen resource governance, in particular, how to make transparency an effective tool for accountability; optimise revenue collection while ensuring predictability of outcomes and an adequate rate of return on investments; manage volatility; allocate revenues for inclusive socio-economic development; promote diversification; integrate the extractive sector into the broader economy by harnessing sector-specific opportunities to support resource-linked development (local content and value addition).

Myanmar is abundant in relatively well-trained and low-cost labour compared with other countries in the region, such as Cambodia and Lao PDR. It has the lowest labour costs among its peers in all job categories except managers in manufacturing, where it is second lowest to Lao PDR (JETRO, 2012). A manufacturing worker earned USD 53 per month and cost their employer USD 1 100 a year in 2011, about a sixth of what a comparable worker would cost in China or Thailand and half what it would be in Lao PDR. The wage differential narrows at job categories that require higher skills: for an engineer it is a quarter or a fifth of what an engineer would cost in China or Thailand, respectively. At managerial jobs, the wage differential with neighbouring countries further narrows. This reflects the relatively greater scarcity of skilled labour in Myanmar.

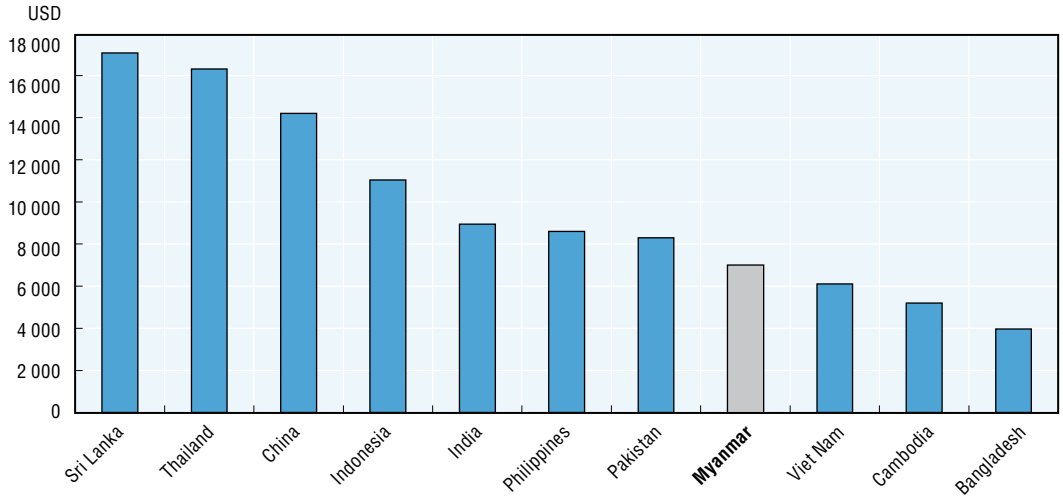
Low wages, however, do not mean proportionately lower productivity levels. In fact, output per person employed is higher than in other regional economies in the same income group such as Bangladesh and Cambodia, and even higher than that of Viet Nam, which is a middle-income country (Figure 1.2). Relatively high labour productivity and low labour costs can serve as a basis for not only manufacturing, but also for service industries. Hotels and catering, transportation, and other services for tourists can also potentially absorb large numbers of workers, especially as the number of visitors is expanding exponentially following the opening of the country. The country received 559 610 visitors in 2012, which represents an average yearly growth rate of 46% between 2009 and 2012.

Myanmar's rich cultural heritage is a major asset that can support the country's development by boosting the tourism sector. The country has many sites of historical, cultural and architectural significance which are comparable to sites in other countries that have world heritage status. Currently no sites in Myanmar are included on the UNESCO World Heritage List, although eight locations have been submitted on its tentative list, including the Bagan Archaeological Area and Monuments – the capital city of the first Myanma Kingdom – and Inle Lake. Areas of natural beauty, such as the 800 or so islands in the Myeik Archipelago in the south, also have the potential to be developed as tourist destinations.

Making the most of these cultural and natural assets will require careful management, developing tourism in a sustainable way that does not degrade or destroy the very features that make Myanmar an attractive destination for tourists. The Ministry of Hotels and Tourism is updating their existing five-year plan for the development of the tourism sector. The Ministry has stated that it aims to foster quality tourism that does not adversely impact the environment and is looking at the lessons learned from neighboring countries' experiences of developing tourism as well as drawing on advice and support from multi-lateral and bilateral partners who are active in this field, such as UNESCO.

Figure 1.2. **Labour productivity is relatively high in Myanmar**

GDP per person employed in 2011, in 1990 USD converted at Geary-Khamis PPPs



Source: The Conference Board (2012), *Total Economy Database™*, January 2012, www.conference-board.org/data/economydatabase/.

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Turning geography to Myanmar's advantage

Myanmar's geographic location is in itself a resource to take advantage of. However, for many years, Myanmar was largely isolated from the international community and the country's advantages and development opportunities were therefore weakly tapped. With the exception of a few countries which benefited from access to resources and trade routes, Myanmar's international relations were weak. As Myanmar embarks on domestic reforms, other countries are now adjusting their economic relations and re-calibrating their foreign policies towards Myanmar. This will have a potentially large impact on the country's development path. Myanmar stands to benefit from opening up sources of investment, aid, and co-operation and trade relationships, although evidently these will need careful management and co-ordination. In addition, greater international competition for contracts, for example, for natural resource extraction, would increase Myanmar's negotiating power and with it the possibility of more beneficial deals for long-term development.

Myanmar has a strategic location for logistics

Myanmar's location between the two emerging giants of China and India and its access to the Indian Ocean via the Bay of Bengal ensures its geo-strategic importance. For its neighbours, Myanmar holds the key to increasing connectivity and the ease of trade in the region. The country forms a land bridge between South Asia and Southeast Asia and provides access to maritime trade routes in the Indian Ocean. Major infrastructure projects to improve transport links between the countries in the region are being planned or are already underway. The Asian Highway, which connects India to Thailand via Myanmar (the AH1), is being upgraded and a bus service is planned to run from Imphal, the capital of India's Manipuri, to Mandalay; the Myanmar-Lao PDR-Viet Nam Trilateral East-West Corridor will link the sea ports of Kyaukphyu on Myanmar's west coast to the Hai Phong sea port in Viet Nam. China has helped Myanmar build a road linking Yunnan Province with a port on the Ayeyarwady River (Vaughn and Morrison, 2006).

Myanmar's location and connectivity potential is also an important part of China's energy security strategy, which to a great extent shapes its foreign relations towards the country (Burgos Cáceres and Ear, 2012). Since becoming a net importer of oil, China has recognised the importance of its sea lines of communication from the Persian Gulf (Lee, 2002). Currently, 80% of China's oil imports pass through the Strait of Malacca, but this shipping channel could be vulnerable. Myanmar represents an alternative route for transporting oil and gas. China has invested in a port and pipeline that could supply 20% of its oil and gas needs. The twin oil and gas pipeline running from Myanmar's deep-water port of Sittwe to Kunming, capital of China's Yunnan Province, is due to come online in June 2013 and will transport natural gas from Myanmar's Shwe offshore gas field and oil from the Middle East and Africa.

For India and China in particular, increasing connectivity could also potentially revitalise their landlocked regions (Arnott, 2001; Singh, 2012). The economic integration of India's northeast could increase its prosperity and reduce the high levels of poverty that have contributed to the insurgency in that region. Myanmar is also key to the modernisation of China's south western provinces. The opening up of trade routes via the Indian Ocean and South Asia would make Kunming in China's Yunnan province a major economic hub in Southeast Asia, as it would lie at the convergence of the planned transport and communications corridors linking Myanmar, Lao PDR and Viet Nam (Kaplan, 2012).

The push for greater economic co-operation and connectivity has been supported through Myanmar's inclusion in multilateral frameworks and regional initiatives. In 1997, Myanmar became a member of ASEAN, the primary body for multi-lateral co-operation for Southeast Asian countries. For India, BIMSTEC[2] and SAARC[3] are two mechanisms through which it is hoping to strengthen relations. In 2008, Myanmar became an observer of SAARC and India is supporting Myanmar's expressed interest in gaining permanent membership in the body and taking on the role of the 'gateway' for South Asia to Southeast Asia (Singh, 2012). For China, co-operation with Myanmar is helped by shared initiatives of the Greater Mekong Sub-region (GMS).[4]

Myanmar's natural resources reinforce the country's geographic advantage

Myanmar's natural resources are another factor which reinforces its geo-strategic importance. A steady and increasing supply of energy, raw materials and natural resources is needed to maintain China's economic growth and its search to secure these resources is changing the geopolitics of the region. This has particular implications for Myanmar given its resource-rich status. Myanmar is an important source of energy as well as raw materials for China. For example, China constructed and operates a 600 megawatt hydropower plant in the north of Myanmar, and owns 100% of the installed capacity. In return, Myanmar receives 15% of the output from the installed capacity for free and can buy up to 50%; the remaining 50% (300 megawatts) goes to China. Energy co-operation is also part of India's strategic engagement with Myanmar. Like China, this rapidly growing economy is seeking new sources of energy. Thailand is another important destination for Myanmar's energy exports: nearly a quarter of Myanmar's oil and gas production is exported to Thailand and the Zawtika project currently under construction in south-eastern Myanmar will supply a further 300 million metric cubic feet a day to Thailand. That project operated by the Petroleum Authority of Thailand Exploration and Production International, which has an 80% stake in the project; the remaining 20% is owned by Myanmar Oil and Gas Enterprise (MOGE), a large state-owned enterprise. Energy contracts with foreign investors have typically been negotiated on a 30-year basis and below market prices.

Foreign policies toward Myanmar are being recalibrated and the country's geographic potential can be fully exploited

Recent domestic policy shifts within Myanmar have led countries to recalibrate their foreign policies towards the country, with many countries ending or reducing diplomatic and economic sanctions (Box 1.2). This has enabled Myanmar to begin to re-build ties with other countries and to pursue more diversified economic and political relations. These improving relations are paving the way for a normalisation of aid relations which will enable Myanmar to access more finance and technical assistance for development projects.

Box 1.2. **The sanctions regime against Myanmar**

In the 1990s, the growing international condemnation of Myanmar's military regime resulted in a number of countries imposing sanctions which were maintained and further expanded over the following decades. The US enforced some of the strongest sanctions. In 1997, US President Clinton issued an executive order prohibiting new American investment in Myanmar, citing as justification the "large-scale repression of the democratic opposition". This was followed in 2003 by the Burmese Freedom and Democracy Act which banned the importation of all products from Myanmar and the export of financial services from the United States or by US persons, wherever located in order to restrict the financial resources of Myanmar's ruling military junta. The scope of the sanctions was progressively expanded by additional executive orders in 2007 and 2008. In 2007, Canada also began a similarly strict sanctions regime against Myanmar, encompassing an arms embargo, asset freezes and prohibition of dealings with certain Myanmar individuals, as well as the prohibition of imports, exports, investment, the docking and landing of ships and aircraft and the provision or acquisition of financial services.

EU measures against Myanmar began with an arms embargo in 1990. Wider sanctions were imposed in 1996. The EU sanctions included a visa ban and an assets freeze for senior members of the regime and their associates, a ban on non-humanitarian aid and a limited investment ban, but still allowed the import of some commodities and products. The EU strengthened its measures against Myanmar through the 2007 Common Position, which imposed a ban on imports of textiles, timber, gems and precious metals. Other countries including Australia and Japan also imposed sanctions on Myanmar to varying degrees, covering arms embargos, reduced economic assistance and targeted travel and financial sanctions.

Myanmar's recent reforms have prompted countries to reassess their sanctions regimes, although so far all have kept the arms embargo in place. Australia lifted its remaining targeted travel and financial sanctions in July 2012. Canada eased its sanctions in April 2012, although it kept an assets freeze and the dealings prohibition on certain individuals in force along with the arms embargo. After suspending sanctions in 2012, the EU decided to permanently lift all sanctions in April 2013. In late 2012, the US suspended broad trade and investment sanctions (with the option of re-imposing them if the need arose) although retained targeted restrictions against some officials and associates of the former regime. These targeted restrictions were extended for a further year in May 2013.

The easing or lifting of sanctions has been welcomed by some who criticise the effectiveness of economic sanctions as a foreign policy tool but has been questioned by others, particularly rights groups, who have argued that it is too premature to reward the regime for its reforms and that human rights abuses are still on-going.

First of all, donors came together at the First Myanmar Development Co-operation Forum in January 2013 in Nay Pyi Taw and signed the Nay Pyi Taw Accord, which intends to ensure effective co-operation between the government and development partners.

India's engagement with Myanmar has been strengthening since the 2011 reforms. President Thein Sein visited India in October 2011 and India's Manmohan Singh returned the visit in May 2012, the first time an Indian prime minister had visited the country in 25 years. The two countries signed 12 memorandums of understanding or agreement covering issues from border area development to transport and connectivity (Singh, 2012). Like China, India's relations with Myanmar had fluctuated over the decades. Upon independence from Britain, India and Myanmar (then known as the Union of Burma) enjoyed very close relations. Burma took a neutral stance in international politics and India and Burma were among the founding members of the Non-Aligned Movement which originated at the Bandung Conference in Indonesia in 1955.[5] However, the introduction of nationalist economic policies – such as those which prohibited foreigners from owning land and obtaining business licenses – adversely affected the large Indian diaspora living in the country at the time, straining relations with India (Arnott, 2001; Aung and Myint, 2001). In any case, India's "Look East" policy which began in the early 1990s meant that the country had already started to engage more with Myanmar in a bid to begin its globalisation strategy with its near-neighbours. The 2011 domestic reforms in Myanmar have provided the political impetus to enable this process to accelerate.

The Myanmar-China relationship remains mutually important, especially while Myanmar's renewed relations with Western countries are nascent and yet to produce significant financial flows of investment and aid. The two countries established a "comprehensive strategic partnership" in 2011 which was recently reinforced by the state visit to China of President Thein Sein in April 2013. Through this partnership, they pledged to strengthen co-ordination and co-operation across a number of areas and also within multilateral frameworks such as the ASEAN 10+1,[6] ASEAN 10+3,[7] the East Asia Summit (EAS),[8] the Greater Mekong Sub-region and the United Nations. The importance of the relationship has been publically stated by President Thein Sein as well as opposition leader Daw Aung San Suu Kyi.

Finally, the political reforms – including the release of political prisoners, the freeing of Aung Sang Suu Kyi from house arrest and the 2012 by-elections which saw the opposition National League for Democracy (NLD) take a number of seats in the now largely civilian parliament – prompted a thawing of US-Myanmar relations. For example, Secretary of State Clinton visited the country at the end of 2011, and the United States eased its sanctions just prior to the visit of President Obama in November 2012. The United States has also reinstated an ambassador in the country.

It is important to stress that ASEAN has played an important role in reducing Myanmar's international isolation. Myanmar became a member in 1997 and the country has demonstrated its wish to strengthen its role as a regional player through the organisation. In 2006, Myanmar conceded to pressure from the other ASEAN leaders and agreed to forfeit its chairmanship of the summit in order to avoid a Western boycott of the group's meetings. ASEAN ministers stated that Myanmar could take the chairmanship "once it is ready", indicating an expectation of political reform. In November 2011, following the first steps along the path of reform, Myanmar was rewarded when ASEAN leaders agreed it could chair the 2014 meeting. ASEAN countries are currently working towards achieving the ASEAN Economic Community in 2015, which will create a single market allowing free movement of goods and people between the 10 member countries.

Development to achieve sustainable and equitable growth

Fertile land, abundant natural resources, a rich cultural heritage, a young labour force and a prime geographic location represent enormous development opportunities for Myanmar. How can these advantages be translated into more well-being for its population? Rapid economic growth is an important and pressing objective for policy makers in Myanmar. As the country is starting from a relatively low base, growth will be needed for incomes to rise, lifting people out of poverty and improving living standards. However, economic growth should not be the only objective. Development policies need to go beyond growth, ensuring that the path of development is sustainable and that all citizens share the benefits. Sustainable growth that brings about benefits for all citizens is a multi-faceted target whose achievement depends on political legitimacy and social acceptability as much as purely economic considerations. The Myanmar government's five principles for shaping its reforms – that the reforms be in line with the national policy direction and supportive of sectoral policies, international standards, the requirements of sustainability and the people's will – are in line with this thinking. The government is in the process of constructing a planning framework to achieve its development objectives (Box 1.3). The government envisages four stages of development starting with political transformation and institutional reforms, in particular those aiming at improving governance; followed by economic and social reforms with people-centred development as the objective; government administration reforms as the third stage and private sector development as the last one.

Box 1.3. **Myanmar's planning system and development targets**

To ensure that Myanmar meets its development targets, the government is in the process of establishing a set of plans with varying durations. The on-going Framework for Economic and Social Reforms (FESR), which extends to 2015, identifies four areas of policy priority: *i)* industrial development alongside agricultural reforms; *ii)* balanced development across the regions and states; *iii)* improvements in education, health and living standards; and *iv)* improved statistical systems and data. The FESR also identifies three quantitative targets for 2015: average annual GDP growth of 7.7%; the industrial share of GDP to grow from 26% to 32%; and per capita GDP to increase by 30-40% (from the 2010 base year) in order to attain MDG1.

The FESR aims to serve as a bridge while the National Comprehensive Development Plan, a 20-year long-term plan (2011-2031) divided into a series of 5-year plans, is under formulation. The Ministry of National Planning and Economic Development is charged with co-ordinating the union level plan; line ministries and regions are expected to develop their own plans based on this, although progress appears mixed. In particular, very often the budget goes ahead of planning, which defeats the purpose of the planning. Planning and Implementation Committees were set up in Q2 2012 at the local level to monitor and evaluate the implementation of the respective plans on a monthly basis. In addition to the 20-year National Comprehensive Development Plan, a "Vision" for the coming 25 years is being formulated with assistance by the Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta.

Growth is to be ignited by consumption and investment initially…

Given the relatively low rates of economic growth in Myanmar in the past few years for the low level of its income, the major near-term challenge is how to ignite

growth, i.e. how to embark on a higher growth trajectory. The government has set a target average growth rate of 7.7% until 2015 together with other development targets related to industrialisation and increases in living standards. OECD medium-term growth forecasts for Myanmar indicate that in the present setting without structural transformation the economy can achieve 6.7% real GDP growth in 2017 and an average of 6.3% over 2013-17 (Table 1.1). Therefore, for both short-term growth and for increasing potential growth, policies conducive to a takeoff are needed.

Table 1.1. **Real GDP growth of Southeast Asia, China and India**
Annual percentage change

	2011	2017	2000-07	2013-17
ASEAN-6 countries				
Brunei Darussalam	2.2	2.9	-	2.4
Indonesia	6.5	6.6	5.1	6.4
Malaysia	5.1	5.5	5.5	5.1
Philippines	3.9	5.3	4.9	5.5
Singapore	4.9	3.7	6.4	3.1
Thailand	0.1	5.3	5.1	5.1
CLMV countries				
Cambodia	7.1	7.3	9.6	6.9
Lao PDR	8.0	7.6	6.8	7.4
Myanmar	5.5	6.7	-	6.3
Viet Nam	5.9	6.1	7.6	5.6
ASEAN-10 average	4.6	5.8	5.5[1]	5.5
CLMV average	6.0	6.4	7.8[2]	5.9
Emerging Asia average	7.9	7.4	8.6[1]	7.4
China and India				
China	9.3	8.0	10.5	8.3
India	6.9	7.0	7.1	6.4

Notes: The cut-off date for data is 1 November 2012. For more detailed information on MPF, see www.oecd.org/dev/asiapacific/mpf. Emerging Asia includes ASEAN-10 countries, China and India.
1. Excludes Brunei Darussalam and Myanmar.
2. Excludes Myanmar.

Source: OECD (2013a), *Southeast Asian Economic Outlook 2013: With Perspectives on China and India*, OECD Publishing, Paris, http://dx.doi.org/10.1787/saeo-2013-en.

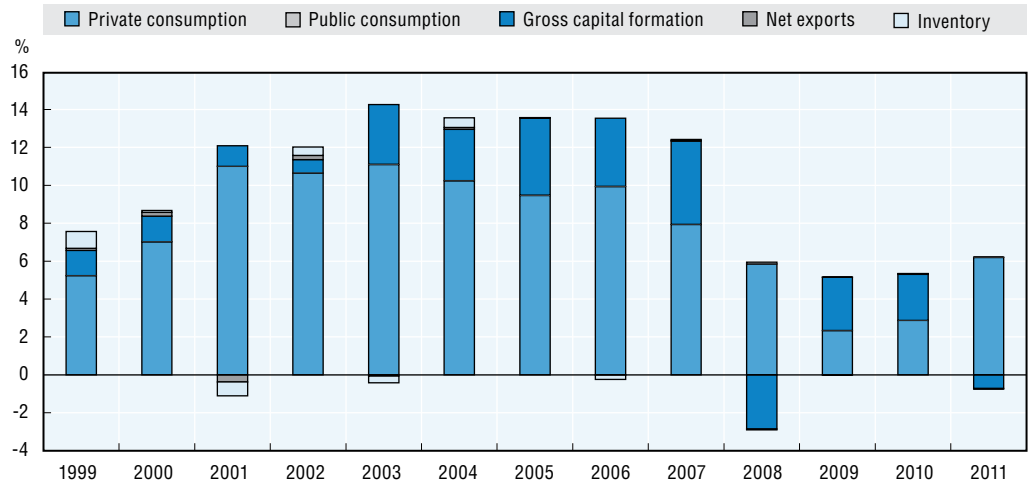
To identify potential future drivers of growth, it is useful to take stock of recent drivers both from the demand and supply sides. Private consumption has been driving growth, notwithstanding the high prevalence of poverty in Myanmar (Figure 1.3). To significantly strengthen private consumption, a broad improvement in living standards is needed. In particular, the incomes of the poor – whose marginal propensity to consume is very high – need to rise. Investment has also been an important driver of growth. Its importance is expected to increase owing to the recent adoption of laws governing foreign investment as well as a better investment climate and reduced economic uncertainty resulting from the speedy adoption of several regulations to strengthen the institutional frameworks for business (see Chapter 2). In particular, FDI and domestic investment in manufacturing and services can be potential igniters of growth; special economic zones and industrial zones are expected to be additional catalysts of the catching up.

The resource sector can potentially contribute to igniting growth, but for sustainable development with widespread benefits, multiple sectors need to take off. In the past couple of decades, steadily rising production and exports of hydrocarbons and minerals supported the expansion of productive capacity on the supply side, in particular in the mining and extraction industries. Extraction, however, has often advanced at unsustainable rates, resulting in a rapid depletion of non-renewable resources.

...but will need to be supported by higher potential growth

Myanmar's population will keep increasing in the coming couple of decades, holding potential growth rates (at which the economy can keep growing in the medium term without increasing inflationary pressures) high, but the structure of the population shows that it will face ageing earlier than other countries in the region with similar income levels. The shape of Myanmar's population pyramid (Figure 1.4) suggests that the increasing population in the coming decades will be contributing to high potential growth. Instead of a concave or expanding pyramidal profile that many countries at similar income levels have, Myanmar's population pyramid is vase shaped with a narrowing base and with the age group of 20-24 years being the most populous. China, for instance, experienced this shape in the 2000s. The vase-shape of the population pyramid, however, is also a sign that the population structure is gradually stabilising and a warning that it is approaching the stage when the working age cohort as a share of the population starts declining. Indeed, population projections for countries at similar income levels in the region such as Cambodia or Lao PDR show that those countries are still on the upward slope of working age population share while Myanmar is on the plateau of the curve (Figure 1.5). This implies that the present growth momentum needs to be fully exploited to avoid getting old before getting rich.

Figure 1.3. **Private consumption has been driving growth**
Contribution of demand components to GDP growth (1999-2011)



Source: Authors' calculations based on IMF (2012), *World Economic Outlook* (database), International Monetary Fund.
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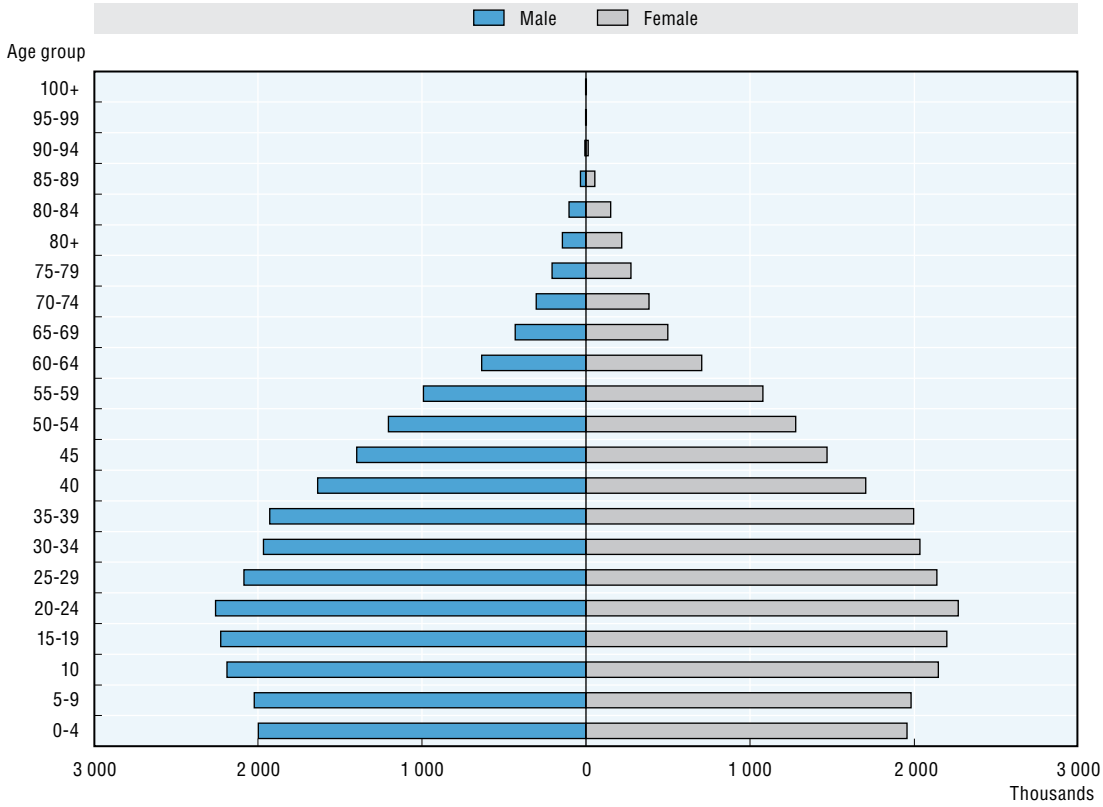
In addition to expanding population, the expected rapid growth of investment will raise potential growth. Investment is expected to grow rapidly given the presently low level of the capital stock and will be financed by FDI inflows, ODA and the government budget for infrastructure investment as well as private business and real estate investment.

Figure 1.4. **Population is growing steadily**

2010



Source: UN (2011), *World Population Prospects (2011), the 2010 Revision: Standard Variants* (database), http://esa.un.org/unpd/wpp/Excel-Data/population.htm (accessed 19 April 2013).

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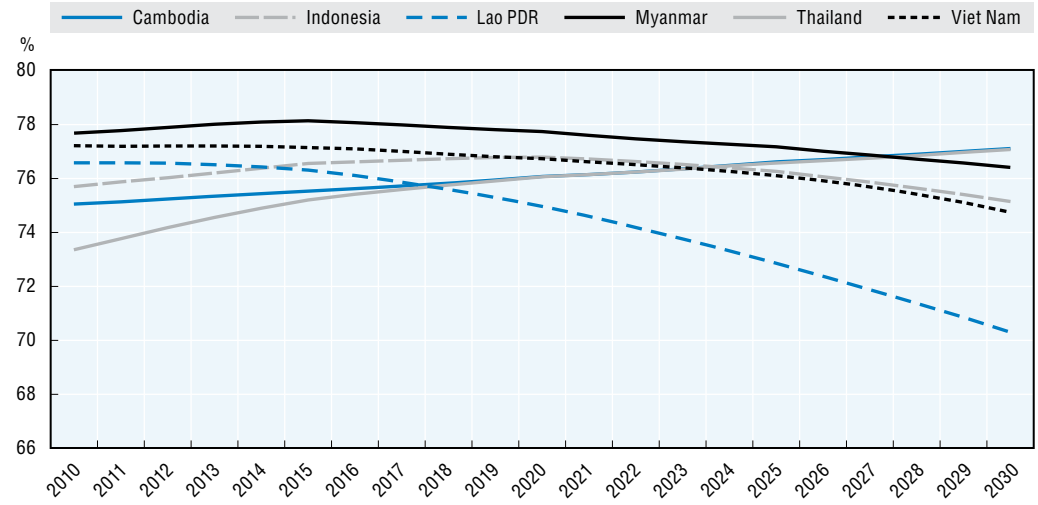
Figure 1.5. **Myanmar will start ageing soon**

Share of age group 10-64 in total population



Source: UN (2011), *World Population Prospects (2011), the 2010 Revision: Standard Variants* (database), http://esa.un.org/unpd/wpp/Excel-Data/population.htm (accessed 19 April 2013).

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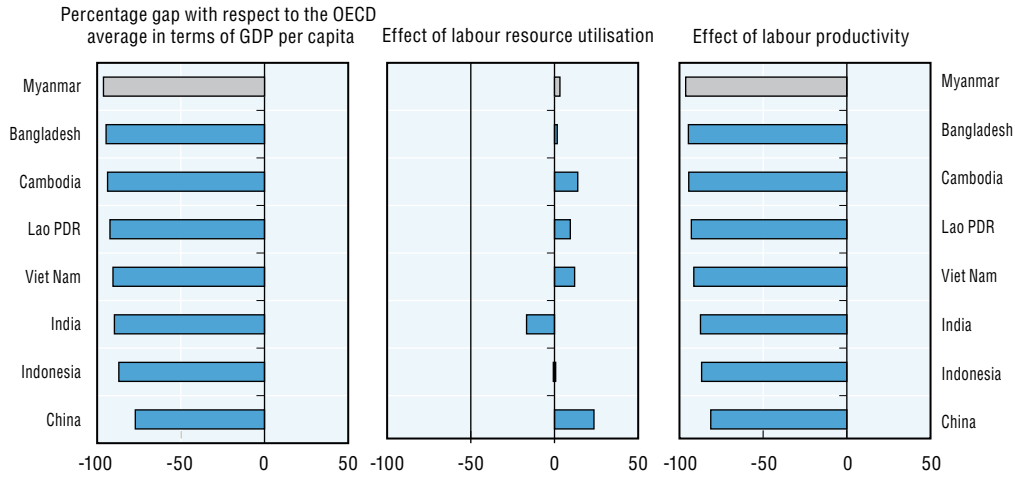
Furthermore, expected increases in productivity in all sectors of the economy and shifts of production factors to sectors where they can be used more efficiently will also boost the growth potential of the economy. Myanmar's per-capita income is 95% lower than that of the OECD average, compared to China's 77% and India's 90% gap, respectively (Figure 1.6). The major source of the income gap with OECD countries is the difference in labour productivity, while in terms of labour utilisation, the country fares relatively well compared to OECD countries. According to the World Bank or IMF population figures, Myanmar has a higher labour utilisation rate than the average for OECD countries. National data sources differ somewhat in that they imply a lower labour utilisation rate compared to the OECD, but they still imply a large labour productivity gap. The overall implication is that policy reforms aimed at increasing labour productivity are needed to lift the long-run potential of the economy.

Figure 1.6. **Real income difference with OECD is due to the productivity gap**

Percentage point differences in GDP per capita with respect to the OECD average, 2010



Note: GDP in US dollars at current prices and purchasing power parities.

Source: Authors' calculations based on CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar; IMF (2012a), *World Economic Outlook* (database), International Monetary Fund; OECD (2013b), *OECD National Accounts Statistics* (database), http://stats.oecd.org/; and World Bank (2013a), *World Development Indicators* (database), http://databank.worldbank.org.

StatLink *http://dx.doi.org/10.1787/888932857064*

Ensuring that growth is stable and sustainable will be a key challenge

Once growth takes off, the key priority will be to ensure that it remains stable and sustainable. Ensuring Myanmar's development requires addressing some of the potential sources of instability stemming from the macroeconomic environment as well as practices in various sectors of the economy that threaten sustainability, including the exploitation of natural resources such as land, forests, minerals and other renewable and non-renewable resources. Sustainable development finally requires creating jobs in manufacturing and services to absorb the increasing supply of labour in the economy.

Potential macroeconomic sources of instability include the high debt burden, the monetisation of the fiscal deficit and inflation and exchange rate volatility. Any of these factors alone could derail the development process and destabilise the economy.

- Public debt may not appear high by developed-country standards (Myanmar has a debt ratio at around 50% of GDP), but the debt-service burden is particularly high given the low revenues that the authorities collect. More fiscal space is needed to meet development spending needs.

- As much of public debt is owed to foreigners, debt service also implies the need to raise foreign exchange earnings. Furthermore, technology and machinery is imported from abroad, further boosting foreign exchange demand. In recent years a major source of foreign exchange has been the exports of natural resources and foreign direct investment. Natural resource revenues need to be channelled through the government budget and exports through border trade recorded in official statistics so that foreign exchange earnings are accounted for in a more transparent manner.

- Inflation will be somewhat less of a threat to stability as a result of the strengthening of the independence of the central bank and as the switch to financing the deficit by treasury bond issues reduces the propensity to monetise the fiscal deficit. Food price rises remain, however, an important source of inflation volatility as the weight of food in the consumer price index (CPI) is very high at 68%. While the central bank managed to rein in inflation recently, inflation could increase as a result of an increasing inflow of funds from the informal sector to formal channels.

- Exchange rate policy is also considered a major priority for the central bank in sustaining macroeconomic stability, in particular avoiding excessive appreciation of the kyat as a result of inflows through remittances, FDI and resources exports. More diversified exports would help provide more stability to the economy by reducing vulnerability to the volatility of revenues stemming from fluctuating commodity prices.

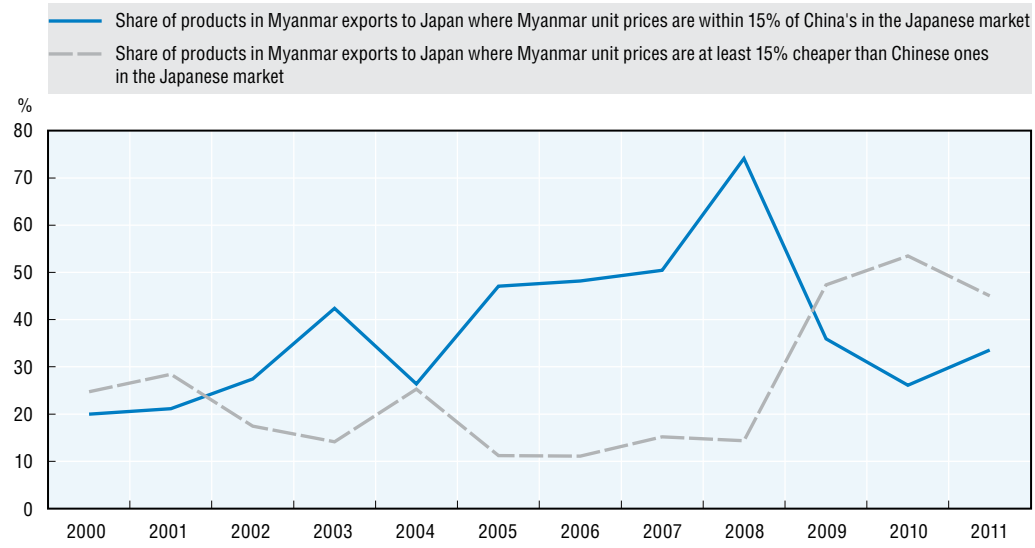
Myanmar appears to have been effectively exploiting its labour cost advantage in relation to most of its competitors. In the Japanese market, for instance, where sanctions did not prevent Myanmar companies from exporting their products, since 2008 the share of Myanmar products with lower prices than Chinese products in the same category increased significantly to about 50% (Figure 1.7). This increase was accompanied by a reduction in the share of products sold at similar (i.e. within a 15% difference) prices as Chinese products, which means Myanmar companies managed to keep prices lower than their competitors.

A more sustainable use of resources requires changes in many practices, in particular, in agriculture. Halting exploitative farming practices can, among other things, help transform agriculture into a more important driver of stable, sustainable as well as equitable development. Currently many farmers practice slash-and-burn cultivation, in which an area of forest is burned and the land cultivated until the nutrients are exhausted. The area is then abandoned and the farmers move to a new area of land to start cultivation there. This method of farming has low land productivity but high returns to labour with minimal energy inputs. While this system of farming can be suitable in particular environments, there are questions of sustainability if areas of land are not left fallow long enough for them to recuperate or if population densities increase (Roder, 2001). In 2010, 9.1% of farming plots in Myanmar had been acquired by their current users by clearing forest land, an increase from 7.5% in 2005. This type of farming is particularly common in Chin State, where 72.2% of plots held in 2010 had been cleared

by their owners. This practice, which was not significantly addressed in the new land laws, is environmentally unsustainable and acts as a substitute for fertiliser use and discourages fixed investments to improve yields and productivity.

Figure 1.7. **Myanmar exports are becoming more competitive**

2000-11



Note: The figure shows the share of Myanmar's exports in the Japanese market where the unit prices of Chinese and Myanmar producers in the same product categories at the 6-digit HS level are within 15% from each others' (continuous line) and the share of Myanmar exports in the Japanese market where Myanmar unit prices are at least 15% lower than those of Chinese competitors, similarly in the same product categories at the 6-digit HS level.

Source: Authors' calculations based on UN Comtrade (2013), *UN Comtrade* (database), United Nations Commodity Trade Statistics Database, http://comtrade.un.org/.

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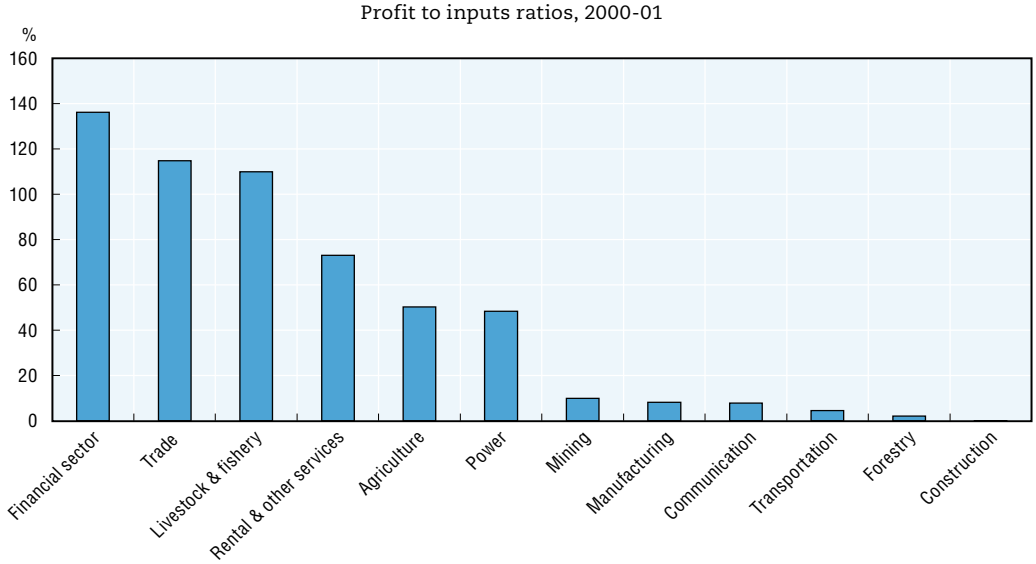
Sustainable growth also requires that the pace of job creation is at least sufficient to absorb new entrants to the labour market. The current driver of FDI inflows and to some extent of overall growth, the resource sector, is typically not a major source of employment creation. Agriculture, as currently the major provider of jobs and of domestic output, will play a crucial role in the economy, but with mechanisation and productivity increases, its employment is expected to shrink. Instead, labour-intensive sectors, notably manufacturing and services, are needed for sustainable development in countries with a growing population such as Myanmar, since it is those sectors where most jobs are created. The manufacturing sector is expected to become a major pillar of multi-pronged development as it is currently small, at only about 20% of total output, and relatively low-cost and young labour is abundant. Realising manufacturing's potential will require overcoming several challenges. The manufacturing sector is less profitable than most other sectors, in particular some services industries as well as energy and agriculture (Figure 1.8) and it produces low value-added outputs (Thwin, Yoshida and Maeda, 2010). While labour costs are low, they are only one factor in production costs. Service link costs are high, to a large extent due to a lack of reliable electricity supply and the extra costs implied by occasionally switching to oil-fuelled generators burning imported oil. Other infrastructure, such as transport infrastructure is also underdeveloped and is inefficient and expensive. The lack of physical infrastructure, however, is only part of the picture. The institutional framework for the operation of private businesses – including foreign and domestic – has only recently begun to be laid out (see discussion in Chapter 2).

Figure 1.8. **The manufacturing sector produces little profits relative to inputs**

Profit to inputs ratios, 2000-01



Note: Profits are taken directly from the input-output tables and inputs are proxied by the sum of intermediate inputs sourced domestically and imported, labour costs and depreciation costs.

Source: Thwin, N. K. S., T. Yoshida and K. Maeda (2010), "Industrial Structure in Myanmar using a new Estimated Input-Output Table 2000-2001", Journal of the Faculty of Agriculture, Kyushu University, https://qir.kyushu-u.ac.jp/dspace/bitstream/2324/18856/1/p387.pdf.

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Growth will also need to be more equitable

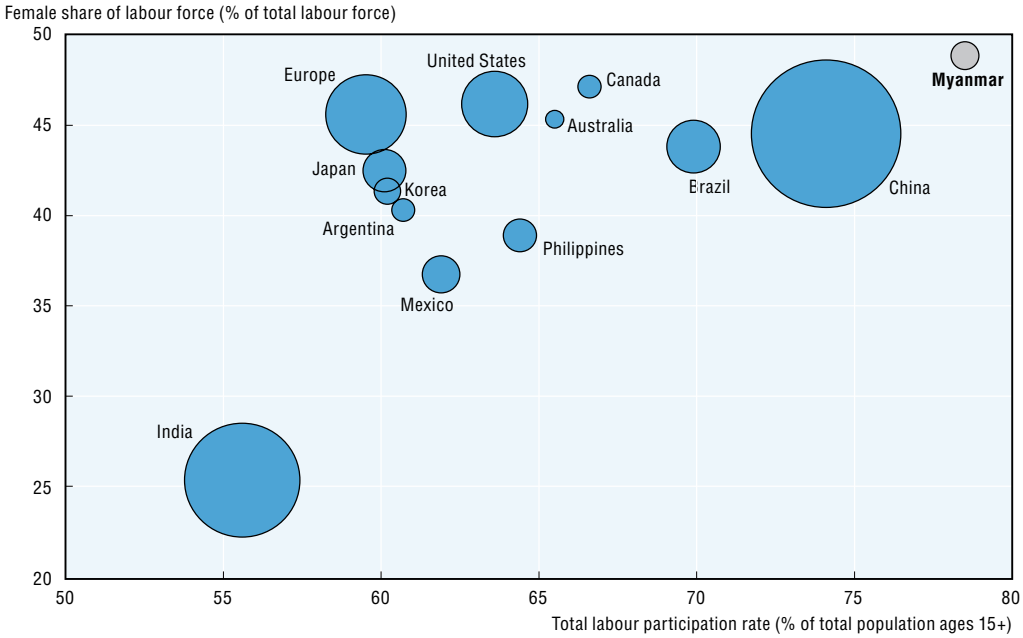
Development can only be sustainable if it is equitable, benefitting all. Though there are disparities between urban and rural areas and among geographical regions in Myanmar, neither overall labour market participation nor women's share in the workforce seem to be major contributors to inequality (Figure 1.9). Myanmar's labour force participation rate is very high at 78%, although this partly reflects the low education attainment, at least through full-time education and the number of compulsory years of schooling, and the low life expectancy. Also, the aggregate participation rate is probably overstated due to under-employment in the agriculture sector, where 70% of the population is engaged.

Another feature of Myanmar's labour market is a high share of women in the workforce, which reflects again the high share of agriculture in economic activity, where all working hands are put to use. Notwithstanding the very high share of women in the workforce, they still face certain disadvantages compared to males. Myanmar scored 0.437 on the Gender Inequality Index (GII),[9] placing it 80th out of 148 countries (Figure 1.10).

While the GII gives an indication of gender inequalities in terms of outcomes (in reproductive health, empowerment and the labour market), it is also important to look at the causes. The OECD Social Institutions and Gender Index (SIGI) is an innovative measure of the underlying drivers of gender inequality, i.e. the social practices, norms and formal and informal laws which restrict women's full participation in the economic and social spheres of a country.[10] Myanmar ranked 44th out of 86 developing countries in the 2012 OECD SIGI (Figure 1.11). The status of women in Myanmar has been shaped by decades of military rule. Violence, particularly sexual violence in the context of armed conflict, has been reported as widespread and systematic, with perpetrators enjoying impunity. Furthermore, women are disproportionately affected by the lack of investment in basic services such as health. Women and girls in extreme poverty are particularly vulnerable to trafficking and sexual exploitation. To try to address this problem, the government hinders or restricts international travel for young women under the age of 25 (OECD, 2012a).

Figure 1.9. **Participation is high and women make up almost half of the workforce**

Percentages in total, 2011



Note: The size of bubble represents the size of total labour force for that country. Europe includes Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, and United Kingdom.

Source: World Bank (2013), *World Development Indicators* (database), http://databank.worldbank.org.

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Figure 1.10. **Gender inequalities are not particularly high**

Gender Inequality Index, 2013

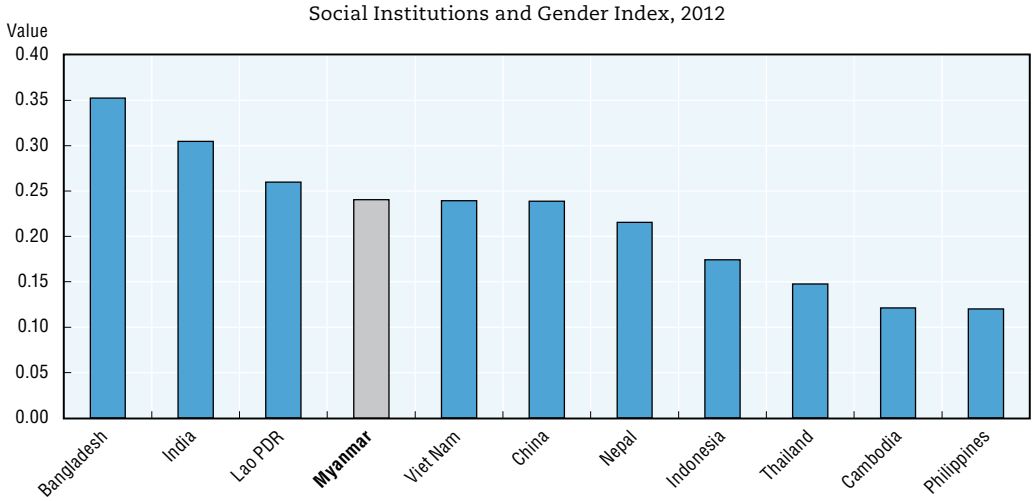
Note: OECD average calculated for the 34 members of the OECD. Scores can range from 0 to 1; a score of 0 indicates that women and men fare equally, while a score of 1 indicates that women fare as poorly as possible in all measured dimensions.

Source: UNDP (2013a), *Human Development Report 2013*, United Nations Development Programme, www.undp.org/content/dam/undp/library/corporate/HDR/2013GlobalHDR/English/HDR2013%20Report%20English.pdf.

StatLink *http://dx.doi.org/10.1787/888932857140*

Figure 1.11. **Some social institutions restrict women's full participation in economic and social life**

Social Institutions and Gender Index, 2012



Source: OECD (2012a), *Social Institutions and Gender Index: Myanmar Country Profile*, OECD Social Protection and Well-being Statistics (database), http://stats.oecd.org/.

StatLink *http://dx.doi.org/10.1787/888932857159*

Women have legal rights equal to those of men to inheritance; to apply for bank loans and engage in other types of contracts; and to acquire, administer and dispose of property. Furthermore, the Married Women's Property Act protects the rights of women to own property. Section 5 of the Act states: "Any married woman may effect a policy of insurance on her own behalf and independently of her husband; and the same and all benefit thereof, if expressed on the face of it to be so effected, shall ensure as her separate property, and the contract evidenced by such policy shall be as valid as if made with an unmarried woman." However, different practices and traditions exist in some ethnic groups, which mean that in practice women do not enjoy the same rights as men. For example, in Palaung tradition, when a man dies his property goes to his male relatives rather than his wife; and in the event of a divorce, the woman loses all jointly held property (OECD, 2012a). If not taken into account, this gap between formal laws and customary practices could limit the effectiveness of policy interventions.

Due to a lack of household income data, measurements of inequality and poverty in Myanmar must be based on household consumption, defined as cash purchases of goods. Consumption is not a perfect proxy for income and will likely overstate the degree of equality in a population, as wealthier households tend to consume a relatively smaller proportion of their income. Nevertheless, the Gini coefficient for household consumption was 0.38 in 2009-10, a relatively low figure even by Southeast Asian standards. Differences in consumption by region appeared to be more important than the rural-urban divide in determining this national figure. Urban and rural inequality rates are very similar; about half of total inequality exists within these groups of households compared to 28% between these groups. Decomposed by state/district, only 9.8% of national inequality was determined by within-group differences. While the level of inequality varies considerably by state and district, ranging from a Gini coefficient of 0.3 in Mon to 0.51 in Chin, there is not a clear relationship between inequality and regional poverty rates or median consumption levels.

Poverty, in particular food poverty, is often used as an indicator of unequal distribution of the benefits of growth. Food poverty figures for Myanmar are subject to debate: the 2010 Integrated Household and Living Conditions Assessment (IHLCA) reported a food poverty rate of 5%, but other proxies for food poverty suggest different

magnitudes. When participants in the 2006 survey were asked whether they lacked sufficient money to buy food at some point in the past year, 35% of the respondents answered yes. This ratio increased to 38% in 2012, implying that economic growth did not reduce but, on the contrary, increased this proxy of food poverty. The ratio was higher among the age groups 35-49 and 15-24, somewhat lower for the age group 25-34 in 2006, while the lowest for the above 50 group. The share of people answering yes to a similar question related to shelter was 21% in 2006 and increased to 35% in 2012. Given the regime change in between the two survey dates, it is possible that respondents underreported real insufficiencies during the past regime and are more honest with the opening of the country. Thus, it is possible that this growth in the proxy of food poverty is an artefact of the military regime.

In Myanmar, the sources of inequalities appear different from those in other countries: the underlying dynamism of wealth generation and distribution (or the lack of them) were determined by crony relations, where those in power set the rules and were beyond any laws. Myanmar's mediocre growth performance in the past years appeared to benefit more those that had a greater control over the nation's wealth or had privileges in the form of monopolies or special licences. In contrast, the poor were disempowered as many had their land appropriated or got relocated without reasonable compensation as a result of projects that generated growth but did not benefit the majority of the populace. The nature of inequalities suggests that regulatory changes in factor markets may not be a sufficient remedy; in addition, institutional frameworks are needed that ensure the rule of law, enhance accountability of the government to the populace and strengthen trust.

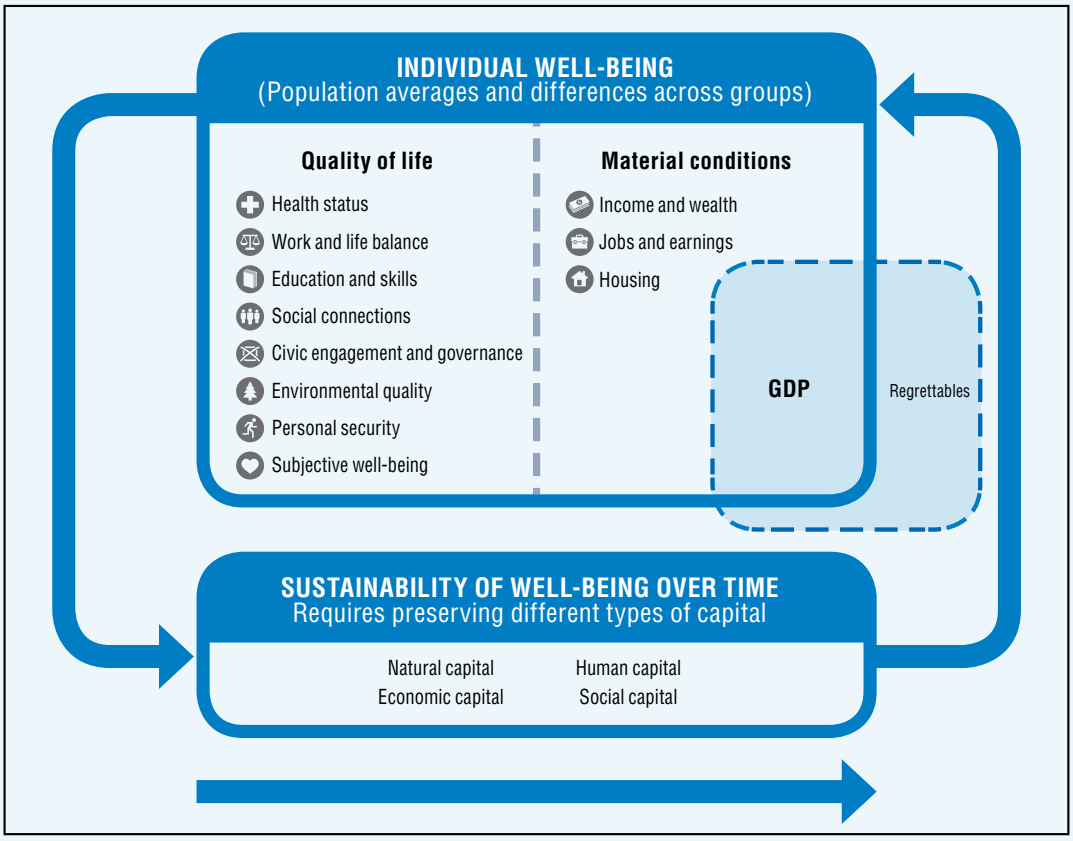
How's life in Myanmar? A glance through the lenses of the OECD well-being indicators

Development involves more than simple improvement in incomes or other material conditions. In its broadest terms, development can be thought of as a sustainable improvement in the well-being of the population of a country. Neglect of the broader dimensions of well-being in development policies is likely to impair their effectiveness, in part because it could lead to overlooking the social and political consensus which is indispensible for the pursuit of these goals.

Providing a simple definition of well-being is challenging because the concept is inherently multi-dimensional and requires looking at many different aspects of people's lives. However, the core concept is relatively intuitive: well-being involves those things that most people around the world would regard as crucial to meeting their needs, as well as the ability to pursue one's goals, to thrive, and to feel satisfied with life (Box 1.4). While people living in countries at different levels of economic development are likely to place differing weights on the various elements of well-being, one important lesson that can be drawn from the several national initiatives conducted around the world on measuring people's well-being is the remarkable level of agreement on its basic elements.

Under most circumstances an increase in GDP per capita is likely to result in an increase in the other dimensions of well-being, all other things being equal. This is particularly the case for developing countries where incomes are relatively low to begin with, and thus the gains to well-being from an increase in income are likely to be highest. Given this, why is it important to consider a wider range of well-being outcomes for a developing country like Myanmar? Would it not be simpler just to focus on indicators of the core economic aspects of well-being?

Box 1.4. **The How's Life framework for measuring progress and well-being**



The How's Life? framework (OECD, 2011) was designed with developed countries in mind, but its general structure is also relevant for developing nations like Myanmar. Current well-being is described in terms of eleven dimensions covering both the material living conditions and the quality of life that people experience. These dimensions are intended to be conceptually distinct (i.e. they capture fundamentally different aspects of well-being) and, taken collectively, comprehensive (i.e. they capture all the important aspects of well-being). Thematically, these dimensions of well-being can be seen as grounded in the capabilities that individuals have to transform resources into given ends (Sen, 1998).

Although most of the eleven well-being dimensions are broadly relevant for both developed and developing countries, some changes in emphasis are warranted when applying such a framework to a developing country. For example, under material conditions, the income and wealth dimension is intended to capture people's economic standard of living and consumption, where in the context of a developing country food security would be an important element of material conditions in its own right. Similarly, unemployment plays an important part for the dimension of "jobs and earnings" in OECD countries, while issues linked to the informal labour market come to the fore in the case of developing countries. As a final example, the dimension of "work and life balance" may focus on the availability of child care in rich countries, and of time poverty in countries at a lower level of economic development. In the analysis of well-being in Myanmar presented below, the How's Life? framework is used as a general guide, but the specific focus is adjusted where necessary.

Box 1.4. **The How's Life Framework for measuring progress and well-being** *(cont.)*

The well-being framework outlined here has a number of characteristics that shape the analysis presented below. First, it is concerned with the well-being of *individuals and households* rather than with aggregate economic conditions; second, it focuses on well-being outcomes rather than inputs; third, it considers the distribution of well-being outcomes as well as their overall level; fourth, it takes into account both *objective and subjective aspects of well-being* (i.e. people's evaluations and feelings, which the individual concerned can report); and, finally, it considers both well-being today and in the *future*. This perspective recognises that aggregate economic conditions do not necessarily capture the experience of households, and that outcomes may be imperfectly correlated with the resources devoted to achieving them. It also acknowledges that inequalities in outcomes matter, particularly when these inequalities are concentrated in specific population groups or span multiple outcome areas. Both objective and subjective aspects of well-being are considered because both matter: while the objective conditions in which people live are essential to assess well-being, it is also important to assess people's own evaluations and feelings about their lives. Future well-being implies valuing the well-being of future generations as well as the current population and is thus concerned with the sustainability of well-being through time. This is described in terms of the four capital stocks that underlie the social production function for well-being.

While the statistical information that is currently available for Myanmar allows for only a partial application of this framework, this section provides a first, high-level review of how life is in Myanmar. Improving the statistical information on people's living conditions in Myanmar should be an important priority within the broader agenda of upgrading the statistical infrastructure of the country (see later statistics in this chapter).

Taking account of the full range of well-being dimensions is pivotal because all other things are not equal. The various well-being dimensions are not only final outcomes, valuable in themselves, but also important determinants of each other. The health status of the work force, education levels, and the quality of governance are major determinants of economic output. Some attempts at growth accounting suggest that the contribution of these factors (loosely grouped under the heading "intangible capital") to economic output is approximately twice that of natural capital and more than three times that of a country's physical capital stock (World Bank, 2006). Similarly, material living conditions are also important drivers of health status and subjective well-being.

Consideration of all the dimensions of well-being is also important because policy trade-offs exist between them. At the simplest level there is a trade-off in government budget allocations between pursuing different objectives: funding allocated to policing may improve personal security, but cannot then be spent on education. However, trade-offs can also occur simply as a negative side effect of an improvement in one outcome. Air quality may deteriorate due to rapid economic growth that improves household incomes, while increased urbanisation may have a positive impact on jobs and earnings but a negative impact on social connections.

Finally, examining the non-economic aspects of well-being is important because not all dimensions of well-being are strongly correlated with economic outcomes. This matters, because evidence suggests that the impact of many non-economic outcomes on people's assessments of their lives is large relative to that of their income (OECD, 2013c), even in relatively poor countries. If the drivers of the outcome in question are amenable to policy, these areas may offer the potential to increase the well-being of the population

faster than would be expected from the rate of economic growth alone. Alternatively, well-being outcomes that are not easily amenable to policy, and which are not correlated strongly with economic growth (such as people's social ties, or relations between groups with different religions or ethnicities) represent potential problem areas that, if not addressed, may undermine popular support for reforms aimed at increasing the rate of development.

The remainder of this section examines indicators of well-being for Myanmar over time and in relation to comparable indicators for other "benchmark" nations. The indicators for Myanmar are chosen so that they cover all of the main dimensions of well-being, are available for Myanmar, are likely to be updated in the future on a regular basis and for which comparisons can be made to other countries. These indicators form a baseline for monitoring Myanmar's development and assessing progress. They can be monitored into the future at a relatively low cost and provide a reasonably comprehensive way to assess the impacts of development across all the relevant dimensions of well-being.

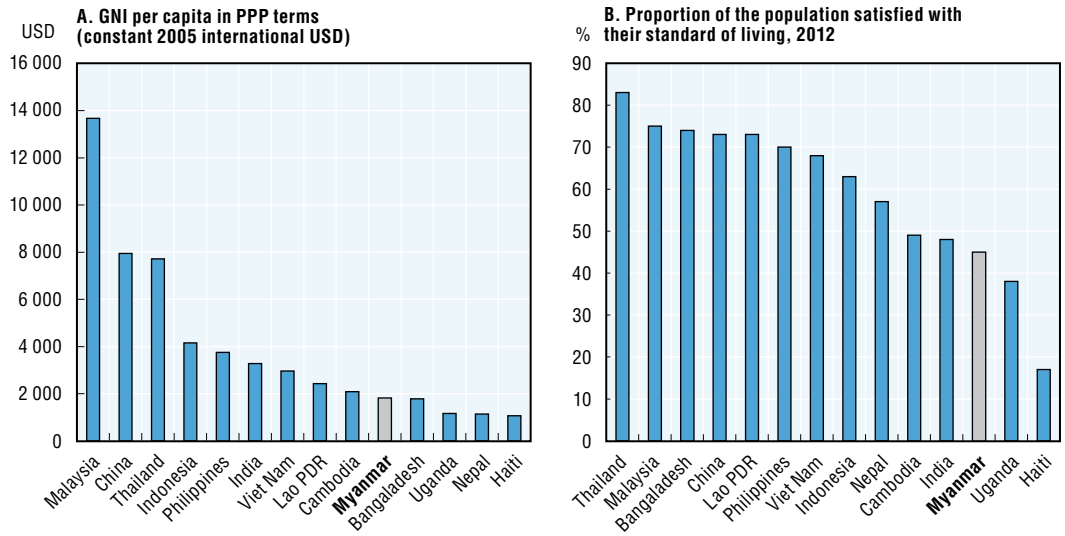
Most of the benchmark nations have been selected either because they have geographical, cultural, or economic ties to Myanmar, or because they are at a similar level of economic development. By looking at the outcomes achieved in these countries it is possible to develop a picture of a well-being possibility frontier for Myanmar. These countries provide an indication of the level of outcomes in different domains of well-being that might be achievable for Myanmar and allows for the identification of areas of relative strength or weakness for Myanmar when compared to similar countries. Several other countries that are at significantly higher levels of economic development compared to Myanmar and are either direct neighbours or other members of ASEAN are also included in the benchmark group to provide signposts as to possible future outcomes of the development process and to assist in assessing the gap to be closed in development outcomes.

Material conditions and subjective satisfaction are low in Myanmar

In the OECD well-being framework material conditions are measured under three broad headings: income and wealth, jobs and earnings, and housing conditions. However, for Myanmar data on both jobs and earnings and housing conditions is very limited. The main focus of this assessment is therefore on income and the population's subjective satisfaction with its standard of living. Real GNI per capita is the best measure of people's economic resources that is available for Myanmar. It measures the gross flows of income (earnings, self-employment and capital income) to people in Myanmar. The proportion of people satisfied with their standard of living provides an overview of how people perceive their material living conditions and provides a useful complement to the GNI per capita.

Myanmar is the poorest country in Southeast Asia, with a per capita GNI 13% lower than that of Cambodia (the next poorest) and 24% below that of neighbouring Lao PDR. Myanmar's GNI per capita is less than a quarter of that of Thailand (Figure 1.12). The other comparator countries, selected on the basis of similar levels of GDP per capita (and proximity in the case of Bangladesh), have somewhat lower levels of per capita GNI than Myanmar.

Figure 1.12. **Material conditions and subjective satisfaction are low**



Source: Gallup Organization (2013), *Gallup World Monitor* and UNDP (2013b), *International Human Development Indicators* (database), United Nations Development Programme, http://hdr.undp.org/en/statistics/.

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Although Myanmar's GNI per capita is low, the proportion of the population satisfied with their standard of living is, in relative terms, even lower. Out of the 13 comparator countries considered here, only Haiti and Uganda have less of their population reporting that they are satisfied with their standard of living. Notably, both Nepal and Bangladesh have markedly lower per capita incomes than Myanmar but significantly higher levels of subjective satisfaction with living standards. Although it is not possible to test the hypothesis more formally in the absence of reliable information on the distribution of income, a relatively low subjective satisfaction with living standards when compared to other comparator countries might reflect a higher degree of income inequality or relatively slow progress in improvements in living conditions given that subjective judgements of this sort are strongly influenced by individuals' income relative to that of others and relative to their own prior income (Dolan, Peasgood and White, 2008). However, low levels of life satisfaction are unlikely to be driven by gender inequalities, with both men (43%) and women (46%) reporting relatively similar levels of satisfaction.

Quality of life indicators are mixed but generally low

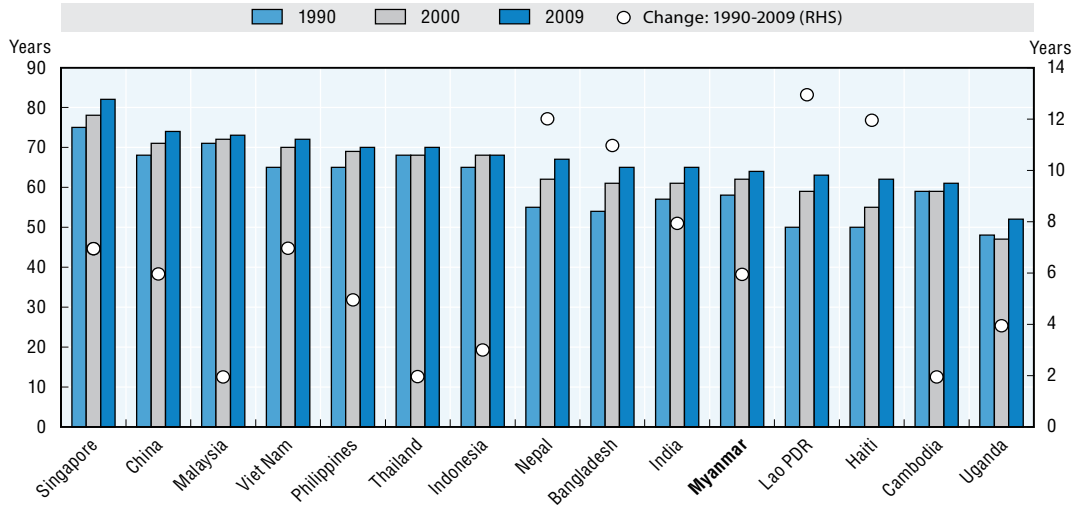
Quality of life covers a wider range of outcomes that are less closely correlated with each other than is the case for material conditions. Information on average outcomes is available for Myanmar for all well-being domains with the exception of work/life balance. In addition, for a number of indicators, some information is available either on changes over time or on the distribution of outcomes.

Life expectancy at birth is a summary measure of mortality rates by age group. It is commonly used as a proxy measure of overall health outcomes as it captures the combined impact of all causes of mortality in a single, readily comparable measure. Current life expectancy (Figure 1.13) in Myanmar (64 years) is similar to that in Lao PDR (63 years) and Bangladesh (65 years) and higher than that of Cambodia (61 years). Across Asia there is strong evidence of convergence in life expectancies, with life expectancy increasing between 2 and 7 years in the best performing countries over the

period from 1990 to 2009, compared to an improvement of between 8 and 13 years for countries starting the period with lower life expectancy. The exceptions to this pattern are Cambodia (increase of 2 years) and Myanmar (an increase of 6 years). Although Myanmar's improvement in health outcomes is in the middle of the range for the group as a whole, it is poor for countries with relatively low life expectancies. Had Myanmar's health kept pace with the other rapidly improving countries (Lao PDR, Bangladesh, Nepal, India), current life expectancy would now be 70 years. Myanmar also has a relatively large gap in life expectancies between women and men, with women living an average of four years longer.

Figure 1.13. **Life expectancy has been low and only slightly increasing**

1990-2009

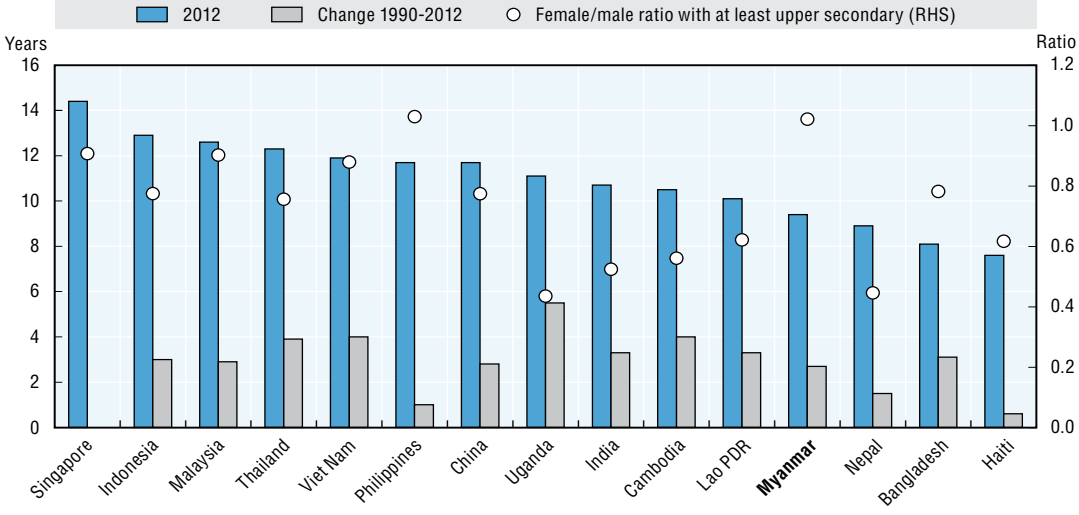


Source: WHO (2013), *Global Health Observatory Data Repository* (database), World Health Organization, http://apps.who.int/gho/data/view.main.

StatLink *http://dx.doi.org/10.1787/888932857197*

Figure 1.14. **Expected years of schooling are relatively low**

Expected years of schooling in Myanmar and female/male ratio with upper secondary education



Source: UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/ and UNDP (2013b), *International Human Development Indicators* (database), United Nations Development Programme, http://hdr.undp.org/en/statistics/.

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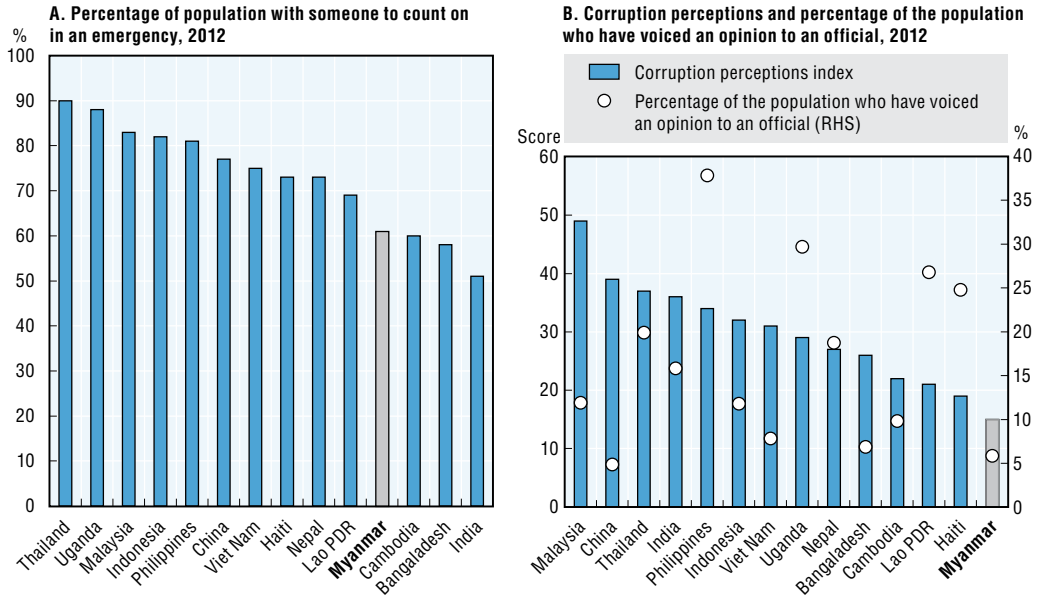
Expected years of schooling provides a proxy measure of the stock of human capital accumulated by a country. At 9.4 expected years of schooling, Myanmar performs better than Bangladesh, Nepal, or Haiti, but worse than Cambodia, Lao PDR, India, or Uganda (Figure 1.14). Both Cambodia and Lao PDR performed at roughly the same level as Myanmar as recently as 2000, but have improved their educational outcomes at a faster rate since then. Myanmar has the second highest ratio of females to males with an upper secondary education of all the countries considered (Figure 1.14). Myanmar and the Philippines are the only two countries of those considered here where more females than males have an upper secondary education.

Social contact is a crucial element of well-being, with time spent with others consistently ranked as more positive than other activities (Kahneman and Krueger, 2006). In addition to being an important element of well-being in its own right, social contact is also an important source of support in times of need. The percentage of the population with someone to count on in an emergency provides a general measure of perceived social network support. The population of Myanmar reports relatively low levels of social support (Figure 1.15). Myanmar is similar to Cambodia and Bangladesh in this regard and India is the only country compared to which Myanmar performs markedly better. By way of contrast, Lao PDR, Haiti and Nepal along with all the wealthier countries considered report much higher levels of social support. Across the countries considered here there are large variations in the gender gap with respect to availability of social support, ranging from China and Thailand, where the portion of men reporting having access to social support is 4% and 3% higher, respectively, compared to women, through to Bangladesh and Uganda where the portion of woman reporting access to social network support is 6% higher than for men. Myanmar, along with Lao PDR, Viet Nam, and the Philippines reports no gender gap at all for this dimension.

Figure 1.15. **The level of social support is relatively low and corruption perception is relatively high**

2012



Note: The index can take values between 0 and 100. A lower Corruption Perception score stands for higher levels of corruption in a country.

Source: Gallup Organization(2013), Gallup World Monitor and Transparency International (2012), "Corruption Perceptions Index 2012", www.transparency.org/research/cpi/overview (accessed 10 March 2013).

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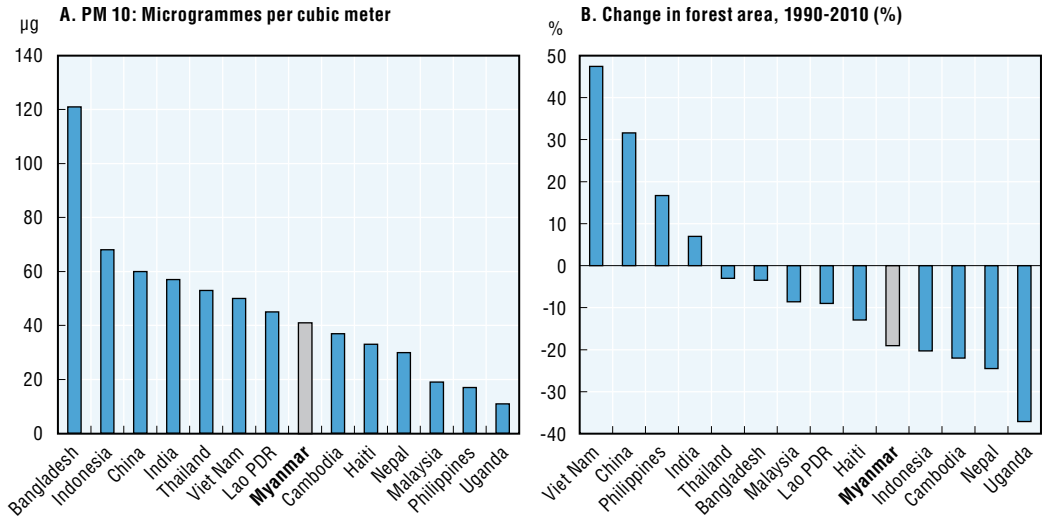
The level of civic engagement and the quality of governance in a country has a strong impact on the well-being of its citizens. This occurs both indirectly, through the impact of institutions on other outcomes such as economic growth, but also directly. Corruption (Boarini et al., 2013), and citizen engagement in decision-making (Frey and Stutzer, 2000) have both been shown to have a direct impact on people's subjective well-being. Two measures have been used to examine civic engagement and governance in Myanmar. The Corruption Perceptions Index is an international index of the degree to which a country is free from corruption based on averaging across multiple surveys (ranging from most corrupt to least corrupt). This is used as an indicator of governance quality in the OECD framework. Civic engagement is measured as the proportion of the population who have voiced their opinion to an official is used to supplement this with an indicator of civic engagement. Myanmar performs poorly with respect to both indicators. Of all the countries considered – none of which rank highly in terms of the absence of corruption – Myanmar scores the worst. With an index rank of 15, Myanmar is perceived as considerably more corrupt than Haiti (19), Lao PDR (21), Cambodia (22), or Bangladesh (26). There is considerably more variability across the comparator countries in terms of the proportion of people having voiced their opinion to an official. Here too, however, Myanmar performs quite badly, with only China reporting a lower level of civic engagement. Both China and Myanmar also show a large gender gap, with less than 3% of women in both countries reporting having voiced an opinion to an official compared to 7% (Myanmar) and 9% (China) of men. This is unlikely to be a purely cultural phenomenon, as outcomes for Myanmar and China vary significantly when compared to those for Thailand, Viet Nam, and Lao PDR.

People's lives are strongly affected by the quality of the physical environment in which they live. The impact of pollutants and hazardous substances on health outcomes is considerable. In addition, the quality of the environment also has intrinsic value to many people as it constitutes a defining feature of the circumstances in which they live. A key indicator of environmental quality is the concentration in the air of PM10, which is particulate matter 10 microns or less in diameter. High concentrations of PM10 in the air can cause health problems and the quantity of PM10 per cubic meter of air is a standard indicator of air quality. The change in forest area provides a supplementary measure of the trend in environmental quality.

Myanmar has a moderate level of PM10 air pollution (Figure 1.16, Panel A). At 40 micrograms per cubic meter, Myanmar's air quality is neither particularly bad nor good when compared with its neighbours. However, this represents a relatively high base level for a country at Myanmar's stage of economic development and suggests the potential for air quality to be a significant issue as the economy grows. Myanmar's forest cover decreased by 19% over the two decades to 2010 (Figure 1.16, Panel B). This is roughly in line with Nepal, Cambodia and Indonesia, but worse than Lao PDR – a neighbouring country with similar dependence on primary exports.

The homicide rate (Figure 1.17) is a proxy indicator for personal security more generally, and is less subject to measurement and reporting biases than measures of other types of crime. Compared to most of the comparator countries, Myanmar has a high homicide rate, with more than twice as many homicides per 100 000 than all other countries except the Philippines, Haiti, Indonesia and Uganda. Of the countries considered, only Uganda has a higher homicide rate. Both Uganda and Myanmar, the two countries with the highest homicide rate face active military confrontations in parts of the country and this undoubtedly contributes to their relatively poor performance.

Figure 1.16. **Environment quality has so far been acceptable**



Source: UNDP (2013b), *International Human Development Indicators* (database), United Nations Development Programme, http://hdr.undp.org/en/statistics/ and World Bank (2013), *World Development Indicators* (database), http://databank.worldbank.org.

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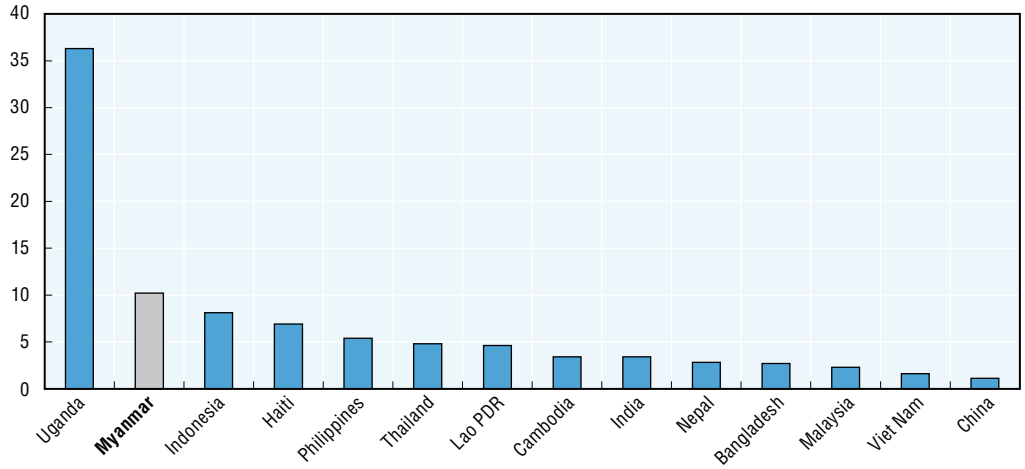
Figure 1.17. **The level of personal security is low**

Homicide rate per 100 000, 2010



Source: UNDP (2013b), *International Human Development Indicators* (database), United Nations Development Programme, http://hdr.undp.org/en/statistics/.

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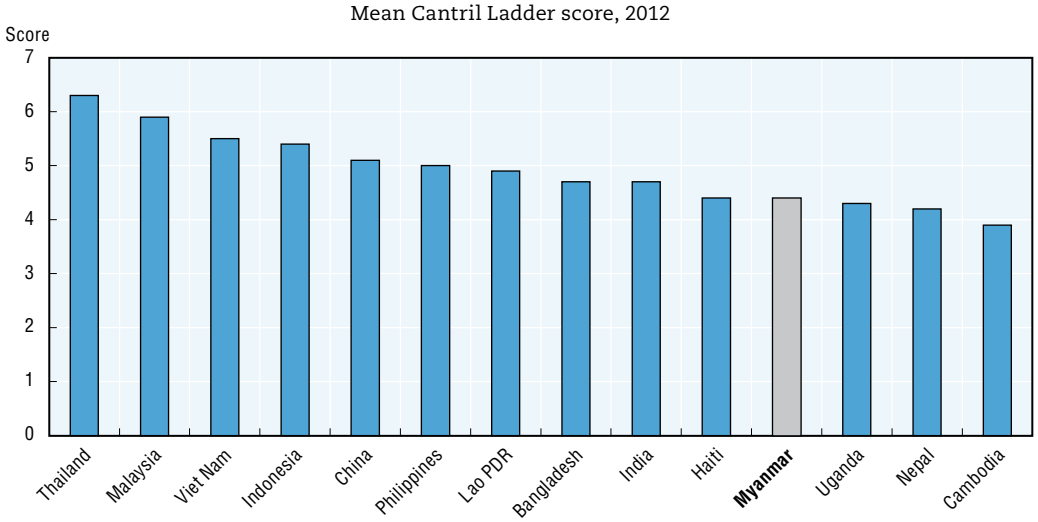
Subjective perceptions of safety, however, are relatively high in Myanmar, with 89% of the population reporting that they feel safe walking at night. This is equal to Indonesia, and slightly ahead of both China (82%) and Bangladesh (81%). In contrast, Malaysia, Uganda and Haiti each report less than 45% of the population as feeling safe walking at night. Interestingly, Myanmar also has a relatively small gap between male and female perceptions of safety, whereas in both Uganda and Malaysia the portion of men reporting feeling safe walking at night is 24% higher than for women.[11]

People's subjective experiences and evaluations of their lives are a fundamental component of individual well-being. Measures of subjective well-being complement objective indicators by capturing information that is grounded in people's preferences rather than in a-priori judgements about what are the important drivers of well-being. Myanmar's mean life satisfaction (4.4), measured by the Cantril Ladder (Figure 1.18) that measures people's satisfaction with life as whole, places the country in a similar position to that which one would expect from Myanmar's performance with respect to the other dimensions of well-being covered here. Myanmar performs better than four other countries (Cambodia, Nepal, Uganda and Haiti) but below the other comparator countries. Its average score of 4.4 is very low in an overall international context.

Figure 1.18. **Subjective well-being in Myanmar corresponds to its income level**

Mean Cantril Ladder score, 2012



Note: The Cantril Ladder measures people's satisfaction with life as a whole.
Source: Gallup Organization (2013), *Gallup World Monitor*.
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Social capital is Myanmar's greatest comparative weakness

Simply describing average outcomes for the different well-being domains and ranking Myanmar compared to other countries provides little information that is directly relevant for policy. While monitoring progress in this way is necessary to ensure that improvements in incomes are not off-set by a lack of progress in other dimensions of well-being, it is not sufficient to identify where Myanmar's strengths and weaknesses lie. A more analytical approach is needed to identify where Myanmar lies relative to some benchmark level of outcomes attainable for a country at a similar state of development.

To develop a set of benchmark outcomes for Myanmar, a series of regressions was run with GDP per capita as the independent variable and the well-being indicators as the dependent variable (Box 1.5). The estimated relationships between GDP per capita and the well-being indicators were used to calculate benchmark outcomes for the well-being indicators for a country with a per capita GDP similar to that of Myanmar, all other things being equal. To measure Myanmar's situation relative to the benchmark, the difference between Myanmar's actual outcome and the benchmark is reported in terms of standard deviations of the outcome measure in question and normalised so that an improvement in the score always indicates a better outcome (e.g. an improvement in the score shows a fall in the homicide rate, but an increase in life expectancy).

Box 1.5. **GDP and other well-being dimensions**

Implicit in a focus on GDP growth as the primary goal of development policy is the view that other outcomes important to individual well-being largely increase in line with GDP. This may occur either because higher GDP allows more resources to be devoted to improving the outcome in question (e.g. housing conditions), because an improvement in the outcome in question is necessary to improve GDP (e.g. jobs and earnings), or both (e.g. education and skills). The regression analysis used to set benchmark scores against which to compare Myanmar also provides information on the degree to which different well-being outcome indicators co-vary with GDP per capita across countries. In the table below, the outcome measures have been grouped as either "high co-variance" if the R2 is greater than 0.5 (i.e. if variation in GDP per capita explains more than 50% of the variance across countries in the outcome measure in question) or "low co-variance" otherwise.

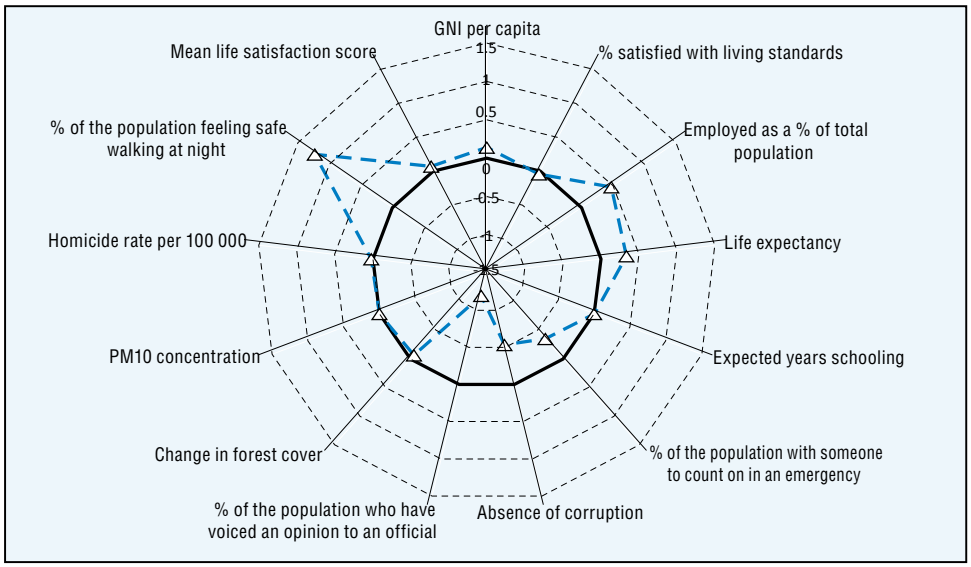
High co-variance	Low co-variance
GNI per capita (income and wealth) (0.9859)	Satisfaction with standard of living (income and wealth) (0.3423)
Access to improved sanitation (housing conditions) (0.6681)	Employment rate (jobs and earnings) (0.1496)
Life expectancy (health status) (0.7189)	Someone to count on in an emergency (social connections) (0.3907)
Expected years schooling (education and skills) (0.7099)	Voiced an opinion to an official (civic engagement and governance) (0.119)
Adult literacy (education and skills) (0.53)	Change in forest cover (environmental quality) (0.2126)
Perceived corruption (civic engagement and governance) (0.6196)	PM10 per cubic meter (environmental quality) (0.0742)
Life satisfaction (subjective well-being) (0.6282)	Satisfaction with air quality (environmental quality) (0.1807)
	Homicide rate per 100 000 (personal security) (0.1413)
	Perceived safety (personal security) (0.1374)

Of the 15 indicators considered, 6 have a high co-variance with GDP per capita while 9 have a low co-variance. In all cases an improvement in the outcome is correlated with either GDP per capita or the natural log of GDP per capita in the expected direction (i.e. an improvement in GDP per capita is associated with an improvement in the outcome) except for air satisfaction and the employment rate. Satisfaction with air quality shows some evidence of a Kuznets curve relationship with GDP per capita, while the equivalent relationship for the employment rate is u-shaped. In particular, the housing conditions, health status, education and skills, and subjective well-being outcome domains correlate relatively strongly with GDP per capita. Environmental quality, social connections, personal security and jobs and earnings have a much weaker association with differences in GDP per capita. For civic engagement and governance the picture is less clear with perceived corruption strongly associated with GDP per capita while the proportion of people who have voiced an opinion to an official has a much weaker correlation.

Those well-being domains where there is a low or ambiguous relationship with GDP per capita suggest areas that may warrant specific policy attention distinct from more general economic goals.

Myanmar's progress in the outcome domains for which indicators are available is mostly similar to what could be expected given its level of income (Figure 1.19). Key exceptions are life expectancy, which is half a standard deviation higher than expected, and subjective security, which is more than a standard deviation better than might be expected. By way of contrast, a clear picture also emerges of the main challenges facing Myanmar. Social resources are relatively weak in Myanmar, with significantly less of the population able to identify someone whom they could count on in an emergency than is expected for countries with a similar level of development. Civic engagement and governance outcomes are even worse. Perceived corruption is half a standard deviation worse in Myanmar than the benchmark case, and Myanmar is nearly one and half standard deviations lower on the proportion of the population who have expressed an opinion to an official than would be expected. This last result is unlikely to be a purely cultural phenomenon associated with respect for authority, as most of the comparator countries used to calculate the benchmark are also Southeast Asian.

Figure 1.19. **Outcomes for Myanmar relative to benchmark: Selected comparator countries**



Note: Bivariate regressions are run with the relevant well-being measures as the dependent variable and GDP per capita as the independent variable to estimate a coefficient for the relationship between GDP and the outcome in question. The coefficient is then applied to Myanmar's actual GDP per capita to produce an expected value for the outcome. Myanmar's actual well-being outcome is expressed as a ratio of the expected outcome measured in standard deviations. Benchmark countries include Bangladesh, Cambodia, China, Haiti, India, Indonesia, Lao PDR, Malaysia, Nepal, Philippines, Uganda, Viet Nam.

Source: Authors' calculations based on Gallup Organization (2013), *Gallup World Monitor*; Transparency International (2012), "Corruption Perceptions Index 2012", www.transparency.org/research/cpi/overview (accessed 10 March 2013); UNDP (2013b), *International Human Development Indicators* (database), United Nations Development Programme, http://hdr.undp.org/en/statistics/; UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/; WHO (2013), *Global Health Observatory Data Repository* (database), World Health Organization, http://apps.who.int/gho/data/view.main and World Bank (2013), *World Development Indicators* (database), http://databank.worldbank.org.

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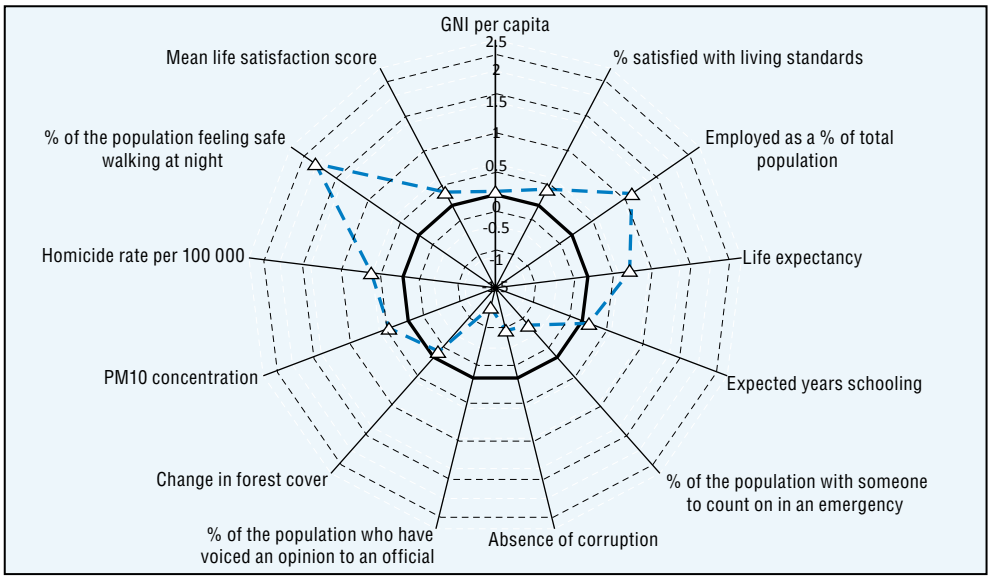
When the dataset used to calculate the benchmark scores is increased to all countries in the world with a population of 1 million or more (Figure 1.20) the general picture changes very little. Myanmar's relative performance in terms of satisfaction with living standards and employment looks better, largely reflecting the inclusion of developed countries in the reference group. The relative performance of Myanmar in terms of the homicide rate also improves, largely due to the inclusion of sub-Saharan Africa in the comparison group. In a global context Myanmar performs marginally better than

expected in terms of air pollution, but worse in terms of change in forest cover. The main stylised fact, however, remains unchanged. In terms of social support, perceived corruption, and civic engagement, Myanmar performs much worse than would be expected given its income. In fact, the inclusion of more countries in the benchmark actually worsens Myanmar's relative performance in these areas.

Figure 1.20. **Outcomes for Myanmar relative to benchmark: World comparison**



Note: Bivariate regressions are run with the relevant well-being measures as the dependent variable and GDP per capita as the independent variable to estimate a coefficient for the relationship between GDP and the outcome in question. The coefficient is then applied to Myanmar's actual GDP per capita to produce an expected value for the outcome. Myanmar's actual well-being outcome is expressed as a ratio of the expected outcome measured in standard deviations. This sample contains 130 countries.

Source: Authors' calculations based on Gallup Organization (2013), *Gallup World Monitor*; Transparency International (2012), "Corruption Perceptions Index 2012", www.transparency.org/research/cpi/overview (accessed 10 March 2013); UNDP (2013b), *International Human Development Indicators* (database), United Nations Development Programme, http://hdr.undp.org/en/statistics/; UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/; WHO (2013a), *Global Health Observatory Data Repository* (database), World Health Organization, http://apps.who.int/gho/data/view.main and World Bank (2013), *World Development Indicators* (database), http://databank.worldbank.org.

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As a developing nation, well-being is generally low in Myanmar when considered in absolute terms. This cuts across all the outcomes considered in this report. However, of greater relevance for Myanmar's development are the strengths and weaknesses of Myanmar when compared to how the country might be expected to perform given its level of economic development. In this respect the profile of Myanmar is somewhat uneven. Myanmar's human capital stock, as represented by employment, health, and education outcomes is somewhat better than might be anticipated. In addition, female outcomes are similar to, or even better than, male outcomes across most of these areas. This is consistent with a society that places a high value on education.

Measured environmental outcomes reflect Myanmar's abundant natural resources, but also suggest a slightly higher than expected run-down of the country's natural capital stocks. Given the weak link between GDP growth and improvements in environmental outcomes (Box 1.5), this will be an important area to monitor in the future.

Offsetting Myanmar's strong natural capital stocks and positive human capital outlook, Myanmar's greatest weakness lies in the area of social capital – those shared norms and values that permit development to take place. This occurs at the official level (reflected in perceived corruption and voicing an opinion to officials) as well as at the unofficial level (reflected in the proportion of the population with someone to count on in an emergency). At both levels Myanmar's performance is over a standard deviation worse than would be expected for countries at a similar level of economic development. This suggests that outcomes in this area will represent a crucial constraint on Myanmar's development unless they are addressed, but also that proportionately large gains can be made if improvements in institutional quality and social trust are achieved.

Building a robust statistical system

Implementing any development strategy as well as ensuring an effective design, adoption and monitoring of policies will require a crucial governance tool: an appropriate statistical system. There are two main dimensions to assessing the statistical capacity of Myanmar. These are capacity and institutional structure. The former captures the technical ability and resources of those agencies involved in collecting statistics in Myanmar. This impacts the scope and quality of the statistics collected and published and the level of analysis that can be undertaken. Institutional structure concerns the degree to which Myanmar's statistical system adheres to the UN principles of official statistics and follows international best practices in managing quality standards across official statistics. This is an important driver of the overall quality and reliability of official statistics.

Capacity of the statistical authority needs to be boosted

The Central Statistical Organization of Myanmar (CSO) was set up in 1952 based on the Statistical Act of 1952. However, since 1962 the Myanmar statistical system has been extensively decentralised. Most government agencies produce their own statistics and only a relatively small proportion of official statistics are produced by the CSO. For example, the agricultural census is collected by the Ministry of Agriculture and Irrigation while the next population census will be collected by the Department of Population under the Ministry of Population and Immigration. GDP is calculated by a department of the Planning Ministry rather than the CSO. The CSO produces a yearbook, forestry statistics, livestock and fisheries statistics, profiles of children and women, and monthly economic indicators.

The CSO is headed by a director general who reports to the Deputy Minister and then the Minister. It has a nominal staffing level of 533 but currently only has about 280 staff. Until 2012 the CSO had no staff at the district level at all and so relied on data provided by District Planning Departments. Recently, the CSO has added staff in each state and region and at the district level. The main focus for these staff is price statistics and foreign trade statistics (170 staff in total).

Capacity in the CSO is limited, reflecting both a lack of resources and the decentralised nature of Myanmar's statistical system. The new population census scheduled for 2014 will provide much of the raw data required to improve the statistical infrastructure of the country. In particular, a comprehensive population census will potentially allow for the development of a survey sample frame to support future household surveys. However, the human capital and staff resources required to take advantage of this information are a key constraint. Making effective use of the census information will require an on-going commitment to improve the capacity of the CSO after the census has been completed.

Streamlining of the institutional structure of the statistical agency would help improving statistics quality

While statistical capacity in Myanmar is limited, a more fundamental concern is the institutional structure of Myanmar's statistical system. While the individual agencies involved in collecting data make basic data entry and data quality checks, there is no system wide process for ensuring data quality. Under the Myanmar Statistics Act of 1952, the CSO's responsibilities formally include requirements to "review and advise on all statistical operations of the Union Government whether performed for statistical, administrative, or other purposes;" to "co-ordinate and integrate statistical operations" and to "establish, prescribe and maintain the highest statistical standards."

However, in practice the CSO lacks the powers required to effectively exercise these roles, particularly with respect to the quality of statistics produced in other government agencies. All work involving the CSO with other agencies needs to take place on a collaborative basis, limiting the ability of the CSO to act in a co-ordinating role. One result of this situation is that there are inconsistencies in statistics produced by different government ministries based on the slightly different administrative needs of different agencies.

A second institutional issue in Myanmar relates to the process for the release of official statistics. After the data are collected and compiled from the departments and the analysis has been completed by the CSO, statistics are submitted to the minister before release. Official statistics are made publicly available only after approval is received from the minister. Even if the minister in question acts scrupulously and makes no attempt to influence the statistics released, this process lacks transparency and potentially undermines public confidence in the statistical system and the independence of the CSO. The significance of this issue is emphasised in the United Nations Fundamental Principles of Official Statistics (1994), the first two of which emphasise that official statistics should be "made available on an impartial basis by official statistical agencies" and that to "retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations… on the… presentation of data."

Concerns around the process behind the release of statistics and system-wide quality control are reflected in the quality of Myanmar's statistical data. A number of key statistics produced as part of Myanmar's official statistical system are not based on adequate quality assurance checks, and appear to contradict other information. For example, reported adult literacy rates are much higher than those achieved in other countries with similar levels of education, while reported rates of access to improved sanitation are much higher than is consistent with figures on waterborne diseases.

The CSO is aware of these issues and is working to address some of the quality issues by liaising with external bodies to facilitate linkages with those agencies in Myanmar involved in the production of official statistics. For example, the CSO is working with the IMF to get Myanmar into the IMF's General Data Dissemination System (GDDS) and Special Data Dissemination System (SDDS). This will provide some support for statistical agencies within Myanmar and assist with some elements of quality control. Wider issues around the independence and transparency of Myanmar's official statistics, however, will require more structural changes.

Immediate steps needed towards better statistics

Improvements to Myanmar's statistical system obviously need to be weighed against other uses of scarce governmental and aid resources. Nonetheless, there are a number of improvements that could be made to the statistical system of the country that would not necessarily have large resource implications. In particular, clarifying and strengthening the role of the CSO with respect to data produced by other government agencies would both align with international best practice and support improved data comparability across the different agencies of the government of Myanmar. Such a role would also allow for more efficient use of the government's relatively limited statistical resources in that expertise on data quality could be concentrated in one place, rather than each agency having to consider quality issues on their own.

A second area of reform would be to strengthen the independence of the CSO by making the Chief Statistician directly responsible for the release of official statistics. Removing the Minister from the release cycle might increase the ability of the CSO to adhere to a pre-announced time-frame for the release of statistics and would contribute to increased transparency of the statistical process. It would also free up ministerial time to focus on the oversight of the CSO and the statistical system as a whole rather than being directly involved in data releases.

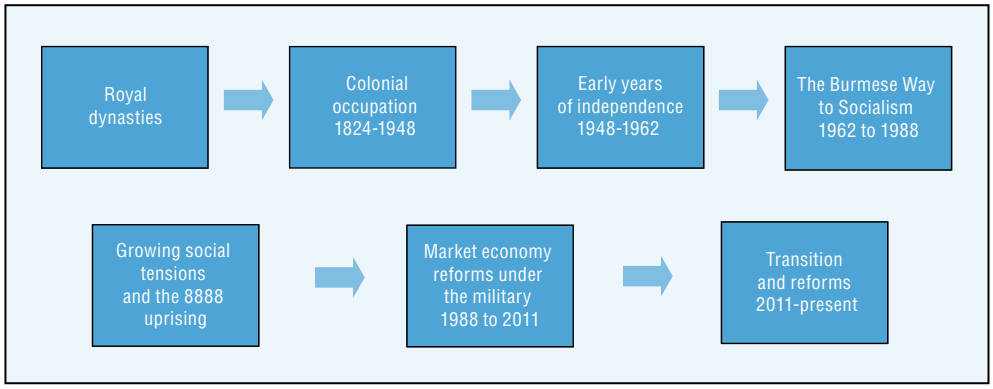
In terms of data needs, the most immediate priorities will be addressed through the 2015 population census. However, beyond this there is a need for regular household level information in Myanmar. This need will intensify as economic growth accelerates since the situation of households can be expected to also change rapidly. It is therefore of critical importance to develop a core household survey focused on demography, labour market, employment, health and educational outcomes, income and consumption. In conducting such a survey, it might be valuable to consider a set of smaller and more flexible surveys conducted on a more frequent basis (every two to three years) than a larger more complete survey that could only be conducted infrequently.

One possible vehicle for considering these proposals is provided by work co-ordinated by the UNESCAP Statistics Division. A group of financial and technical partners co-ordinated by the UNESCAP Statistics Division and drawing on the international expertise accumulated through the Partnership in Statistics for Development in the 21st Century (PARIS21) is supporting Myanmar to: *i)* address certain short-term data and capacity building needs; and *ii)* establish a National Strategy for the Development of Statistics (NSDS). This group, in consultation with national statistical authorities, has proposed a number of assessments, at this stage focusing primarily on economic and industrial statistics. The NSDS will consolidate the various assessments into an overall assessment of the full statistical system. This, in turn, is intended to help define a vision and action plan for developing the country's statistical capacity and for improving the efficiency and relevance of the statistical system. The OECD encourages Myanmar to consider the results of the present MDCR when conducting this overall assessment of the system.

Notes

1. ASEAN is the Association of Southeast Asian Nations. Its ten members are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.
2. The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organisation of South Asian and South East Asian countries. Its members are Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand.
3. South Asian Association for Regional Cooperation (SAARC) is an organisation of South Asian nations. Its members are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
4. Greater Mekong Sub-region is a development project started by the Asian Development Bank in 1992 that brought together the countries of the Mekong River basin (Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam, and Yunnan Province, China).
5. The Non-Aligned Movement sought a middle way for (mainly developing) countries in the Cold War period, aiming to maintain independence, resist pressures from the major power blocs and oppose neo-colonialism.
6. The ASEAN 10+1 brings together the ten members of ASEAN with China.
7. The ASEAN 10 +3 brings together then ten members of ASEAN with China, Japan and South Korea.
8. The East Asia Summit unites the ASEAN 10+3 with India, Australia and New Zealand.
9. The Gender Inequality Index (GII) reflects women's disadvantage in three dimensions — reproductive health, empowerment and the labour market — for as many countries as data of reasonable quality allow. The index shows the loss in human development due to inequality between female and male achievements in these dimensions. It ranges from 0, which indicates that women and men fare equally, to 1, which indicates that women fare as poorly as possible in all measured dimensions.
10. Instead of measuring gender gaps in outcomes such as employment and education, the SIGI captures discriminatory social institutions, such as early marriage, discriminatory inheritance practices, violence against women, son preference, restricted access to public space and restricted access to land and credit. The 2012 SIGI is made up of 14 unique variables, grouped into 5 sub-indices: Discriminatory Family Code, Restricted Physical Integrity, Son Bias, Restricted Resources and Entitlements and Restricted Civil Liberties.
11. The gap between perceived safety and actual safety is not unusual, as there is only a weak correlation between them (OECD, 2011). However, perceived safety is still useful to consider as part of personal security since it is people's perceptions that ultimately drive behaviour, and because perceived insecurity affects well-being in its own right.

ANNEX A.1. A BRIEF HISTORY OF MYANMAR



Royal dynasties

The land on which modern-day Myanmar stands was once ruled by a succession of royal dynasties. The origin of Myanmar is often traced back to the Pagan Dynasty (1044-1287) and it was in this period that Theravada Buddhism was adopted. The Pagan Dynasty eventually fell to a Mongol invasion. It was nearly 200 years later that the Toungoo Dynasty (1486-1752) reunified the multi-ethnic territories. This dynasty expanded the kingdom, conquering the ethnic Shan. The Toungoo Dynasty was succeeded by the Konbaung Dynasty (1752-1885) which followed a similar expansionist path, fighting wars with the ethnic Mon and Arakanese (Rakhine) groups. Due to its location on major trading routes between India and China, Burma was relatively wealthy, although its economy was still largely dominated by subsistence agriculture. This period also witnessed four invasions by China and three Anglo-Burmese wars starting in 1824 which would begin Burma's period under colonial rule.

Colonial occupation, 1824-1948

Britain gradually took control of Burma's territories through three Anglo-Burmese wars (1824–1826, 1852, 1885), annexing Arakan (today known as Rakhine), Tenasserim (Tanintharyi), Lower Burma and finally Upper Burma and sending King Thibaw into exile. Burma was administered as a province of British India until 1937, after which it was a separate colony with a new constitution and an elected assembly. The Burmese economy became part of the colonial export economy and rice dominated the country's exports. The native population, however, benefited little from the booming trade and growing economy, breeding resentment that would fuel frequent strikes and protests and a nationalist movement.

The onset of World War II provided an opportunity for the Burmese nationalists to gain the support of Japan to drive out the British and to achieve independence. Japan provided training to the "Thirty Comrades", the core of the newly-formed Burma Independence Army. However, Japan's occupation of Burma in 1942 did not lead to the country's liberation. The nationalists, led by Aung San, then called on Britain and its allies to drive out the Japanese, which they succeeded in doing by April 1945. After the war, Aung San negotiated with Britain to achieve full independence for Burma, an event that he would never see himself. On 19 July 1947, Aung San and five of his ministers were assassinated by right-wing political opponents, just months before Burma would officially achieve independence. U Nu, a member of Aung San's cabinet, was designated as the new leader.

Early years of independence, 1948-1962

Burma achieved independence from Britain on 4 January 1948 and the country was named the "Union of Burma". Under the new federalist constitution, Burma became a parliamentary democracy and the Kachin, Shan, Kayah (Karenni) and Kayin (Karen) minorities were given autonomous states (and the Chin got a special administrative division). However, almost immediately, Prime Minister U Nu was faced with insurgencies from communist factions as well as ethnic minority groups demanding greater autonomy. Chinese Kuomintang (KMT) forces controlled much of Shan state for many years. Between 1956 and 1958, U Nu managed to negotiate an end to conflict with nearly all groups* through his "arms for democracy" offer in which armed forces which gave up their weapons were allowed to participate in national elections. Despite this achievement, U Nu's Anti-Fascist People's Freedom League (AFPFL) party was in disarray and a split led to the intervention of a caretaker government under army Chief of Staff General Ne Win between 1958 and 1960. During this time, the army led a major crackdown on communist elements within the country. The 1960 general elections saw U Nu's faction of the AFPFL win a resounding victory but his return to power was fleeting. His promotion of Buddhism as the state religion, strongly opposed by the country's non-Buddhist groups, and his hesitation on ethnic separatism raised fears among the military of the possible dissolution of the Union and set the stage for the 1962 coup d'état.

The Burmese Way to Socialism, 1962-1988

In 1962 a military Revolutionary Council overthrew U Nu's civilian government and suspended the constitution. The coup d'état ushered in a period of one-party rule under Ne Win that would last 26 years. The Revolutionary Council's "Burmese Way to Socialism" provided the guiding principles for the Burma Socialist Programme Party (BSPP), the country's only legal political party. Drawing on elements of Marxism, Buddhism and mysticism, the 28-point manifesto became the economic blueprint for the country over the decades to come. It advocated transition to a socialist economy, the nationalisation of all major industries, rejected parliamentary democracy, increased the role of the military and reduced foreign influence. In the phase the followed 1962, Burma transformed from being one of Asia's most prosperous countries into one of the world's poorest. The economic decline saw the country officially reach Least Developed Country status in 1987. During this period, freedom of expression and association were repressed. Political imprisonment and human rights abuses were commonplace. The armed conflicts with ethnic opposition groups in Burma's border areas persisted.

Growing social tensions and the 8888 uprising

By the mid-1980s, years of economic mismanagement and political repression had fuelled a growing dissatisfaction among Myanmar's people. What started in March 1988 as student protests in Yangon spread throughout the country and broadened to a pro-democracy movement which included monks, farmers, civil servants, lawyers and other groups. The protests culminated in a nationwide planned demonstration on 8 August 1988, referred to as the '8888 uprising'. The protests were met with a violent response by the army but they did force the resignation of Ne Win. The BSPP tried to appease protesters by promising general elections under a multi-party system, but the protests continued, demanding nothing less than the dismantling of the regime. The uprising was brought to an end in September 1988 when the military retook power and formed the State Law and Order Restoration Council (SLORC).

Market economy reforms under the military, 1988-2011

The SLORC (from 1997 known as the State Peace and Development Council, SPDC) abandoned the Burmese Way to Socialism, allowing a degree of private sector expansion and encouraging some foreign investment. In 1989, the government changed the official English name of the country from the "Union of Burma" to the "Union of Myanmar" and later to the "Republic of the Union of Myanmar".

In what was expected to be a step towards democracy, the country held multi-party general elections in 1990. The country's main opposition party, the National League for Democracy (NLD), contested the elections and won 392 out of 492 seats. The NLD was led by Daw Aung San Suu Kyi, daughter of Aung San, who had risen to prominence during the 8888 uprising. Despite the NLD's victory, the SLORC refused to give up power. Daw Aung San Suu Kyi was placed under house arrest and many other opposition figures were imprisoned. These events prompted several countries to impose economic sanctions on the country.

In 2007, fuel price hikes sparked anti-government protests which were met with the government's customary force. The protests escalated into a wider non-violent resistance movement led by the country's Buddhist monks, popularly known as the Saffron Revolution. The government responded on 26 September 2007 with a harsh crackdown. This incident further deteriorated the country's image internationally and led to tighter sanctions.

A new constitution was voted in by public referendum in 2008, although opposition groups denounced the referendum as fraudulent. The constitution established the Union Assembly (Pyidaungsu Hluttaw), a bicameral legislature comprising a People's Assembly of 440 seats and a National Assembly of 224 seats. The military was reserved 25% of seats in both assemblies. The constitution paved the way for general elections, which took place in November 2010. The NLD boycotted the elections due to their opposition to the electoral laws. The newly-formed, military-backed, Union Solidarity and Development Party won the elections.

Transition and reforms: 2011-present

Senior General Than Shwe officially dissolved the SPDC on 30 March 2011 and inaugurated former member and prime minister Thein Sein as President. A largely civilian parliament was convened in April 2011. The President then began a series of political, economic and administrative reforms. Ceasefires have been negotiated with 10 out of the 11 armed ethnic groups, and hundreds of political prisoners have been released, including Daw Aung San Suu Kyi, who became a Member of Parliament following the 2012 by-elections. A slew of new laws have been approved or are waiting to be debated by parliament that include relaxation of press censorship, authorisation of labour unions, legalisation of public assembly and protest, and encouragement of foreign private investment. The international community has responded positively to the reforms, easing sanctions in some cases and increasing development assistance. Ethnic conflicts, particularly in Kachin, and inter-communal violence, especially in Rakhine, continue to be a challenge to the reform process.

Notes: *The offer was agreed by the Rakhine nationalists, the Pa-O, Communist groups, the Mon and Shan groups and the People's Volunteer Organisation (PVO). Only the Karen National Union (KNU) continued to fight.

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Chapter 2

Achieving stable and sustainable development

This chapter discusses the policies being undertaken by Myanmar which aim to achieve stable and sustainable development and identifies issues for further attention, particularly in relation to building up institutional capital. It focuses on four priority areas: establishing sound frameworks for macroeconomic and financial stability; strengthening the rule of law; achieving environmentally sustainable development; and creating a level playing field for the private sector. The section on macroeconomic stability examines the country's financial sector and frameworks for monetary, exchange rate and fiscal policies. The discussion on the rule of law assesses the reforms and legislative changes underway as well as the progress made in strengthening voice, accountability and transparency. Next, the degradation of Myanmar's natural resources, the sources of pressure on these resources and the country's legal framework and institutions for environmental policy are discussed. The section on private sector initiatives describes the characteristics of Myanmar's business sector before turning to examine the legal and regulatory frameworks governing private initiatives. The chapter ends with an examination of Myanmar's human and physical capital stocks.

Igniting more rapid growth is only the beginning of the development process facing Myanmar. Growth will need to be stable and sustained over the longer term if the country's potential is to be realised. Success in achieving stable and sustainable growth will require continuing and often difficult economic and institutional changes in macroeconomic and structural capabilities and policies. Many countries have experienced rapid growth at early stages of their development only to see growth falter at later stages because of the failure to undertake the appropriate reforms to achieve these necessary changes.

Stable and sustainable development rests on physical, human, institutional and social capital. These last two types of capital, institutional and social, are deeply entwined: better institutions require more accountability and voice, while improved levels of trust will depend on institutional performance. Myanmar particularly needs to accumulate institutional and social capital, the lack of which is a major binding constraint to its development.

The limited amount of institutional and social capital originates in the country's history. Over the past century, none of the systems the country embraced needed a sophisticated institutional basis, let alone one built on the principles of democracy and a market economy. In the colonial era, when institutions and the administrative system were adopted on the basis of the Indian model, many bureaucrats from India were brought into the country. In fact, the then Burma acquired by the British Empire after the third Anglo-Burmese War in 1885 was administered under British India and only the liberation movements in the 1930s turned it into a separately administered colony in 1937. With the declaration of independence in 1948 and after a decade-and-a-half of internal instability, the old system was swiftly replaced by the command-and-control socialist regime followed by a similarly highly centralised but more repressive system of the military junta in 1988.

With the advent of the new regime in 2011 and a democratic political system, the weight of history and tradition in shaping the new institutions is very low. This provides an opportunity to choose institutions that best fit the path of an opening and democratising economy.

This chapter discusses the policies that are being pursued by Myanmar to strengthen the capabilities essential to stable and sustained development and the further problems that need to be overcome. The top priorities are: *i)* the establishment of effective and sound frameworks for macroeconomic and financial stability; *ii)* the strengthening of the rule of law; *iii)* the management of natural resources in a sustainable way; and *iv)* the creation of a level playing field for the private sector. Strengthening and development of institutional capital – in terms of government capacities, laws, and regulations – along with social capital will also be vital to build up the needed human and physical capital. The discussion will also highlight the areas where more needs to be done and provide illustrations of experiences of OECD and regional economies that may be useful reference for Myanmar.

Securing macroeconomic stability

Macroeconomic stability requires solid institutional frameworks. It is essential for the development of Myanmar's economy as it provides the foundation for savings and investment and sustainable long-term growth. Several episodes of macroeconomic instability have set back Myanmar's economic development in the past decade, including a damaging banking crisis and bouts of near-hyper inflation. Hence it is not surprising that the authorities have given high priority to creating a more effective framework for macroeconomic stabilisation that is underpinned by the establishment of a sound financial system.

In doing so, the authorities will have to confront a number of challenges head on. Specifically, the starting point is one where the economy is still largely informal, relevant institutions have to be newly set up and the technical capacity to absorb new arrangements and policy approaches has to be developed. In order to prevent the economy from falling prey to macroeconomic instability while the reform process is proceeding, careful sequencing of the various steps is crucial. The authorities are well aware of this need, and appear very open to guidance from the international community in this endeavour.

Three areas of policy stand out as in urgent need of reform. First, the financial system of the country needs to be reformed and expanded so as to be ready for the opening up of the economy to international financial and investment inflows and to be able to channel these flows to the most productive uses. Second, the frameworks, institutions and technical infrastructure for effective monetary and exchange rate policies need to be set up to sustain macroeconomic stability and to deal with external and internal shocks to the economy. Last but not least, a framework and the capabilities to implement fiscal policy – including budget allocation, tax policy and public debt management – have also to be developed. The overarching requirement for these reforms to succeed is that steady progress is made in returning economic activities to the formal economy so that they can be influenced by the financial system and macroeconomic policies.

A stable and efficient financial system is an essential foundation

Myanmar's economy is still largely cash-based, thus foregoing the possibility of more efficient pooling of saving, risk sharing and maturity transformation through the formal financial system. This has ramifications for the allocation of capital and hence the economic growth potential of Myanmar. Remittances, which are an important source of income for large strands of the population, are overwhelmingly made via informal devices (money carriers, Box 2.1), and exchanged for local currency in the informal exchange market. This situation is now beginning to change owing to a number of recent measures, such as the unification of formal and informal market-based exchange rates, the installation of the SWIFT system and contracts with Visa and Western Union.

Box 2.1. **The *hundi* system or the *hawaladhars***

The *hundi* system is a well-developed network of money carriers - often called *hawaladhars* following the Urdu phrase for middlemen - stretching primarily over West and Southeast Asia as well the Middle East and parts of Africa. It is intensely used by migrant workers to send back their savings to their families. The system's major characteristics are efficiency and a lack of a paper trail. Its widespread use is related to high banking fees and avoidance of income taxation at destination, but in Myanmar also stems from the lack of banking connections with most of the outside world during the economic sanctions (see Box 1.3).

The establishment of banking relations with overseas players following the opening of Myanmar will likely reduce the scale of the *hundi* system (both for international and in-country transactions), but in the medium term, further reigning in of transactions outside the formal system is needed. Some other countries' experiences provide some guidance about how this might be accomplished. Some countries with large outward remittance flows ("source countries") require that records be kept of transfers above a certain level (for example, the UAE requires the recording of people transferring over USD 550). Other countries have sought to directly encourage the use of formal financial facilities: Pakistan, for instance, has implemented a loyalty system, where the use of formal channels is rewarded.

Myanmar's banking system is small. It is also poorly connected (e.g. there is no interbank market to speak of) and segmented by industry. Therefore competition between banks is weak. There are several specialised state-owned banks that emerged from a break-up of the financial system in 1975 after it was nationalised in 1969. For example, the Myanmar Foreign Trade Bank was created to handle foreign exchange dealings and the Myanmar Agricultural Bank was formed to service agriculture. Some state banks used to exercise functions that normally are handled by the central bank, such as managing foreign exchange reserves and distributing currency. Authorities have recently moved to bring these functions back to the central bank, starting with the transfer of foreign exchange reserves, which has largely been completed.

A private banking sector does exist in Myanmar (Annex Table A.2.1), but it is small and segmented. A number of private banks emerged from a partial liberalisation of the banking industry in 1988. These banks are mostly connected to private business conglomerates, such as Kanbawza Bank (KBZ), established in 1994, which belongs to the "Myanmar Billion Group" which has interests in gem trading, mining, distribution and real estate. Entry to the banking market was further liberalised in 2010 for domestic banks and four new private banks were granted a license.[1] So far, foreign financial institutions have not been allowed to enter, although this is about to change as an official committee has been set up to examine how foreign banks can be allowed to establish branches in Myanmar. Representative offices have already been allowed to enter recently and subsidiaries are likely to be so in the near future.

Lending by private banks is heavily constrained. It is very difficult for the banks to determine the credit-worthiness of potential borrowers (other than the business conglomerates to which they are connected) as financial information and auditing is very weak and small enterprises are not required to produce financial statements.[2] As a result, banks' assets consist mostly of treasury bonds (which come in maturities of 2, 3 and 5 years and are held to maturity as there is no secondary bond market). Otherwise, lending takes place outside the formal sector in an unregulated shadow financial system, at interest rates that are high in comparison with the banking sector (2.5-3% per month) but unconstrained by formal collateral requirements. An official (regulated) microfinance sector competes with the informal sector, but has so far not replaced it.[3] The lending rate of microfinance institutions is capped at 30% per annum. This ceiling is close to the interest rates prevailing in the informal market. No usury laws exist in Myanmar and there is protection only under civil law for borrowers in the informal markets. Imposing a ceiling on informal lending rates would make it easier under a civil lawsuit to determine whether there is an unfair business transaction. Many countries set such ceilings either as an absolute number or a multiple of the official rate and protection under civil law applies only if the rate applied is within those limits.

A handicap afflicting the development of Myanmar's financial system is a general lack of confidence in banks by the public – one manifestation of the limited social capital mentioned in the last chapter. There is a general suspicion of cronyism in the banking industry, in part due to the bankers' tight connections to business conglomerates and in part resulting from (alleged) money laundering activities. This is a potential source of instability as rumours spread quickly and bank runs can easily take off, as happened in the 2003 banking crisis (Box 2.2). Therefore, a top priority for the authorities is to adopt and enforce high standards of corporate governance, accounting, disclosure and prudential regulation and supervision within sound financial institutions and a sound financial system infrastructure.

Box 2.2. **Myanmar's banking crisis in 2003**

In early 2003 Myanmar experienced a severe banking crisis.* The trigger was the collapse of several informal finance companies that were little more than Ponzi schemes and that brought about direct losses for some authorised banks. Exacerbating the crisis were rumours of large-scale money laundering, bank losses on investments in China and withdrawals of deposits. As the panic began to spread, even the state-owned banks were affected and banks soon found themselves short of liquidity and, as a consequence, attempts were made to maintain reserves by limiting depositors' access to their funds. A flight to currency ensued, which led to a shortage of kyat supplies. The means of exchange created by banks (cheques, remittance facilities, credit and debit cards, electronic transfers) ceased to function.

The banking crisis led to severe disruptions to production and distribution. Though most people in Myanmar did (and still do) not have bank accounts, many employers and businesses did and large numbers of workers went unpaid for considerable periods, as did suppliers and distributors. Even firms earning foreign exchange were harmed, as they could no longer convert foreign exchange earnings into kyat to meet their local costs. The situation was worsened further when the authorities allowed private banks to recall loans, forcing firms and individuals to meet loan calls by selling assets. A growing secondary market in frozen bank accounts emerged, with a going price of between 60 and 80% of face value. The banks themselves continued their efforts to acquire liquidity by selling their properties.

The key reasons why the crisis got out of hand were the failure of the monetary authorities to provide credible and visible liquidity support to stop the crisis and the lack of depositor protection via a deposit guarantee. As a result, the costs of the crisis ended up with the depositors and borrowers. The associated disruption not only led to temporary losses of employment and financial wealth, but also produced a permanent loss of wealth associated with the destruction of physical capital, knowledge and skills. Perhaps worse of all, the faith in monetary and financial institutions, which is a necessary prerequisite for Myanmar's economic development, was severely damaged.

Note: *Although there is little documentation available on the crisis, an attempt to reconstruct the events can be found in Turnell (2003).

Bank lending is also constrained by very strict liquidity and solvency requirements, which were introduced in the wake of the banking crisis. Such requirements include a 10% reserve requirement ratio, a 10% liquidity ratio, a 20% single borrower limit and a 20% related party borrower limit (the latter two limits are relevant because of the tight connections of banks to business conglomerates). In addition, banks have to hold 50% of their paid-in capital in liquid assets. All lending is collateral-based by law (since 2003) and the value of assets used as collateral is calculated with 40% of their market value as the for sale value, which in turn is used as a basis for the amount of lending. The loan-to-value ratio is not regulated, but the banks follow the practice of a maximum of 60-70% (of the for-sale value).[4] In addition, deposit and lending rates are fixed by the central bank in order to secure sufficient margins for banks to remain profitable. However, this leaves banks with little scope, or incentives, to engage in competition. The Central Bank is wary of boosting competition for fear of seeing the small and medium-sized banks fail.

Lending by Myanmar banks is limited to short-term lending and for a few purposes. Long-term lending is envisaged in the near future with an interest rate of 15%. Banks

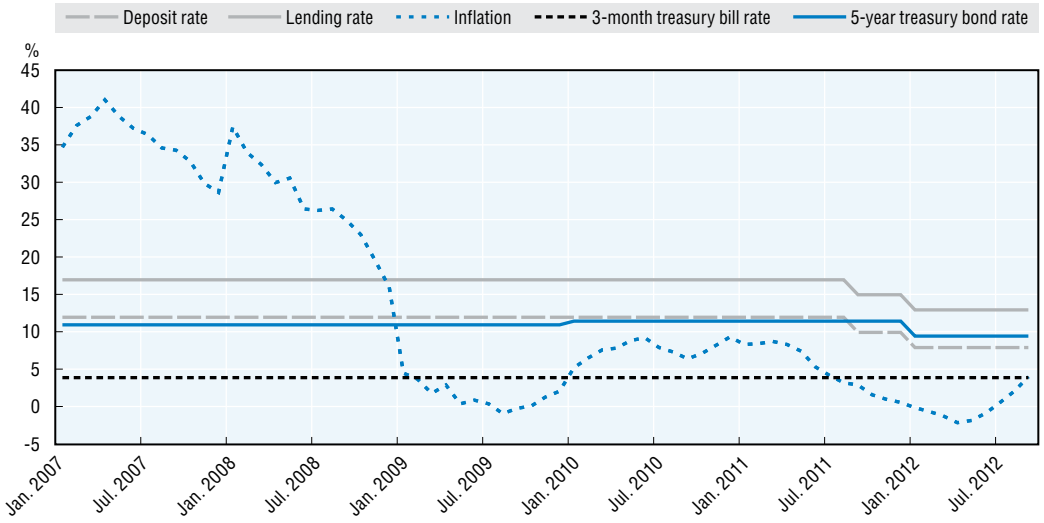
cannot lend for housing purposes except hire purchase lending with a maximum maturity of 36 months. Until recently, they had also been prohibited to lend to the rural sector, thus limiting their scope of activities and increasing their vulnerability to shocks. The rural sector is covered by the Myanma Agricultural Development Bank that has a branch in nearly all townships. Income from non-lending activities such as investment in government bonds and remittance handling constitutes a large share of total income.

As a result of cautious lending policies and significant non-lending activities, the non-performing loan (NPL) rate of private banks is about 2%. State-owned banks have admittedly higher NPL ratios resulting from the lending boom in the 1990s, but the exact size is not disclosed. Those non-performing loans have not been handled as yet, partly because the underlying collateral values are not considered worthy of lawsuits. The Myanma Agricultural Development Bank has a very low NPL ratio currently, but the ratio is expected to rise following the quintupling of the ceiling for loans per acre (from 20 000 kyats to 100 000 kyats).

The authorities aim to modernise the banking industry, and a number of new laws have been or are being drafted to provide a new framework for the sector that will give them more leeway to expand their activities. Moreover, lending and deposit rates have been cut in two steps, along with cuts in the yield on treasury bonds in which banks heavily invest (Figure 2.1). The deposit rate is currently 8% and the lending rate is 13%, securing a 5% margin which has been in place ever since the banking crisis. In order to safeguard the stability of the banking system, the authorities are in the process of strengthening supervision and regulation in conjunction with the IMF and World Bank. As a further safeguard for stability, deposit insurance up to 500 000 kyats (USD 570) per account will be enacted soon, with the ceiling expected to double next year. A credit bureau is to be established soon, paving the way for credit card issuance.

Figure 2.1. **Lending and deposit rates as well as yields on treasury bonds have recently been cut**

Interest rates and inflation



Source: CSO (2012a), *Selected Monthly Economic Indicators*, November 2012, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar; Datastream (2013), *Datastream* (database); and EIU (2013), *Country Report: Myanmar* (monthly from 2008 to 2013), Economist Intelligence Unit.

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The majority of regulations in banking aim at ensuring stability of institutions and there is little attention paid to efficiency or to consumer protection. Administered

interest rates inhibit competition, at least in prices, among private banks, which otherwise could potentially compete and thereby drive efficiency gains. The limited competition is mainly through advertising and providing good customer services. There is no regulation, however, that would require banks to make their products comparable so that customers with low levels of financial literacy could find the product to best fit their needs. Service charges are also administratively set at the same level, although private banks are lobbying for their liberalisation so that they can attract more customers through lower service charges that they achieve by higher efficiency.

The size of the non-bank financial sector is very small in Myanmar, with the insurance sector being a major institution. The monopoly of Myanma Insurance ended in 2013 when 15 new licenses were granted. To avoid brain draining of the best professionals from the state-owned enterprise by the new private entrants, the latter can hire only retired Myanma Insurance employees. While such a measure may be effective in retaining staff, it may induce wrong incentives for those close to retirement and in search of well-paid private jobs.

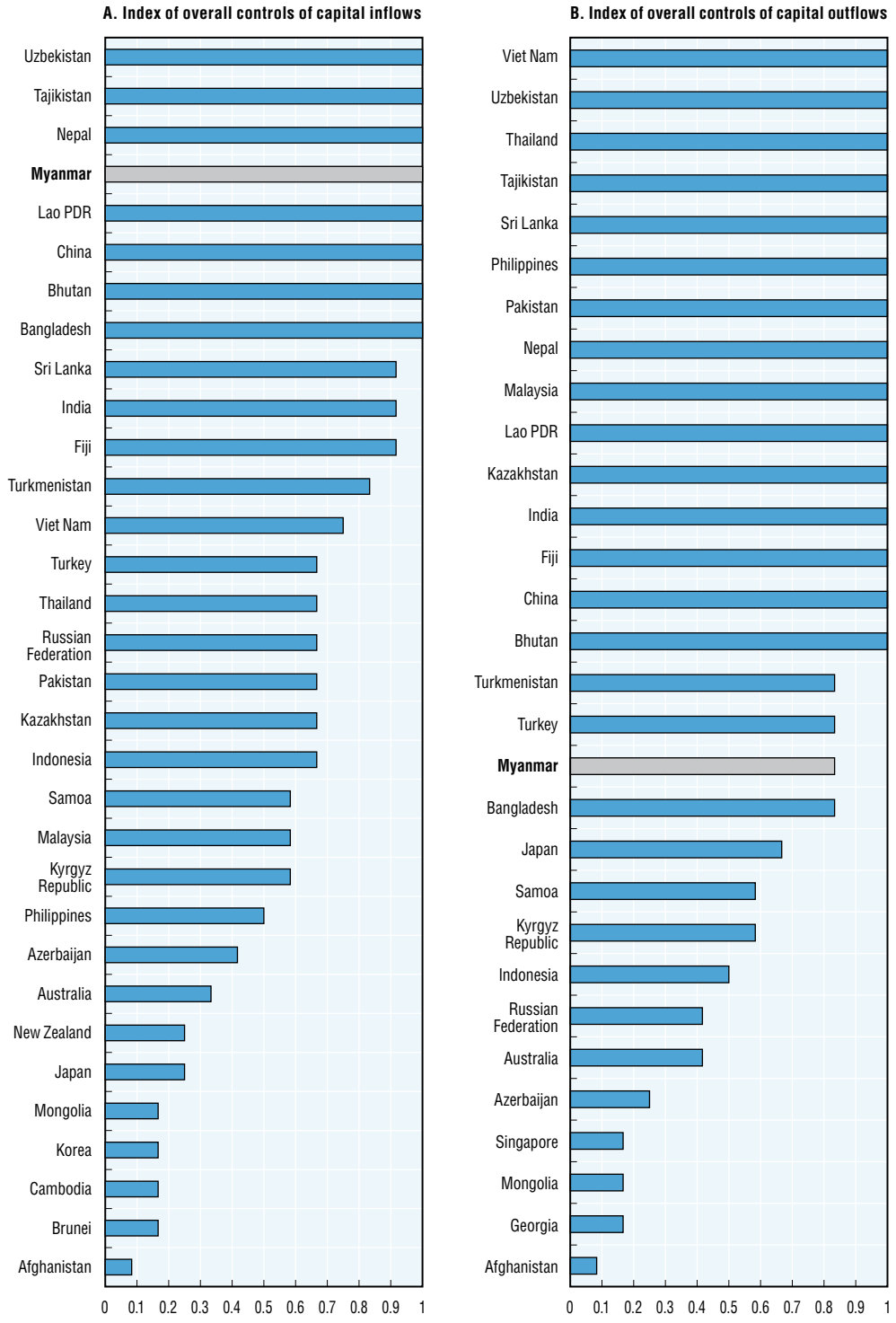
A sound framework for monetary and exchange rate policies is under construction

Moving towards a stable, managed exchange rate regime is expected to underpin Myanmar's growth strategy based on encouraging foreign direct investment (FDI) as a means to import capital, technology and modern production practices, while connecting to the global value chain. Following the examples of other emerging economies in the region, the authorities aim to underpin this strategy by moving towards a stable, managed exchange rate regime. This is part of an overarching strategy to establish a stable macroeconomic environment. While this approach is laudable, it poses challenges for the build-up of a viable domestic industrial base alongside the FDI sector as currency inflows are bound to increase once FDI indeed takes off, possibly giving rise to the so-called Dutch disease.

As it stands, monetary policy in Myanmar pursues the twin goals of price and exchange rate stability. The intermediate targets for monetary policy are monetary aggregates (money in circulation, credit, base money, etc.). Interest rates play a very limited role in monetary policy setting in that these are fixed mostly with the stability of the banking system in mind. This approach is largely in line with the prevailing orthodoxy in low-income countries with weak institutional frameworks, an oligopolistic banking structure and shallow financial markets. The use of extensive central bank intervention in foreign exchange markets to build up foreign exchange reserves to insure against financial instability is also common in such circumstances. Myanmar's international reserves indeed climbed to an estimated USD 6.1 billion, or nine months worth of imports, in 2010/11, sourced mostly by natural gas exports and FDI inflows.

The capital account in Myanmar is still largely closed (Figure 2.2, Panels A and B), and as long as this remains the case, the twin objectives of low inflation and a stable exchange rate are not incompatible.[5] A fundamental prerequisite for monetary policy to be effective in achieving these objectives, however, is to reduce both dollarisation and informality. Dollarisation and informality are strongly intertwined features and stem in part from past experiences that have weakened trust in the national currency and in government policies and impaired the rule of law. Dollarisation fulfils a useful role in that it allows individuals and businesses to avoid risks from high inflation and exchange rate instability. However, the ability of the private sector to switch between local currency and the dollar makes it more difficult for the monetary authorities to control the money supply. Informality, moreover, means that the bulk of money in circulation escapes the official financial system, thus severely limiting the reach of monetary policy as well.

Figure 2.2. **Myanmar implements strict controls on capital flows**



Note: The index of capital control measures takes values between 0 and 1 with higher values indicating higher degree of restrictiveness. It covers the areas of foreign direct investment, portfolio investment and cross-border credit. It is based on the IMF's Annual Report of Exchange Arrangements and Exchange Restrictions and originally constructed by Schindler and extended by the authors until 2010.

Source: Authors' calculations based on IMF (2013), *The Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)* (database), International Monetary Fund, http://imfareaer.org and Schindler, M. (2009), "Measuring financial integration: A new dataset", *IMF Staff Paper*, Vol. 56, No.1, International Monetary Fund (IMF), www.palgrave-journals.com/imfsp/journal/v56/n1/full/imfsp200828a.html.

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Against this backdrop, a host of reforms in the realm of monetary and exchange rate policy are currently being conceived, legislated or implemented, partly in conjunction with international organisations such as the IMF, including:

- A new Central Bank Law to grant the Central Bank of Myanmar (CBM) operational autonomy has been passed. Monetisation of the fiscal deficit, a major source of base money creation and inflation in the past, has already been wound down. First steps are being taken also to set up an interbank market. This market is still incipient, due to a lack of technical capacity and bank technology. The CBM is formally not yet separated from the Ministry of Finance, but is intended to be so once sufficient technical capacity has been built up.

- A new Foreign Exchange Management Law. This law, in effect since April 2012, underpins the unified currency exchange rate, replacing the previous multiple rates that were highly distortive. Previously an official kyat exchange rate of only a fraction of informal market rates was used to subsidise imports by state-owned companies, but heavily penalised exporters. The unified official rate is managed to stay close to a reference rate of 858 kyats per US dollar, based on bids received from the major banks in daily foreign exchange auctions. Foreign exchange controls have been relaxed as part of the currency reform. For current account transactions, permission is no longer needed (profit and salaries can be legally repatriated), and discussions are on-going on opening the capital account. Work on an interbank exchange market is in progress (currently banks can only buy and sell exchange from the CBM). The transfer of foreign exchange reserves, previously managed by two state banks (Myanma Economic Bank and Myanma Foreign Trade Bank) to the CBM has mostly been completed.

- A new Security Exchange Law. The bill has been sent to parliament, with the aim of establishing two stock exchanges before the 2015 elections, in Yangon and Mandalay respectively. However, listing abroad will not be possible and the capital account remains among the most restricted in the region. A secondary market for sovereign debt is also not yet conceived, although there is an incipient primary government bond market. However, investors, which are mainly financial institutions, as noted, hold the securities until maturity given the lack of a secondary market.

- A new Foreign Investment Law. The law, which was first unveiled in March 2012 and is critical to providing the legal foundation for foreign investment in the country, defines the terms on which foreign companies can invest in the country and acquire or form joint ventures with domestic firms. In the longer run, a further opening of the capital account is intended to extend to portfolio investment and cross-border banking once securities markets have been set up and foreign banks are allowed to enter. As discussed in more detail below, such opening of the capital account bears certain risks of instability and makes it all the more important that a framework of sound stabilisation policy is developed. For now, this is not a main concern since a securities market does not exist.

The monetary authorities face several major challenges in the immediate and short run. First, in the absence of secondary sovereign bond and interbank markets and associated price discovery, there is no guarantee that monetary targets and administratively set interest rates are consistent with each other. For instance, if demand for reserves is strong, this is not signalled in interbank markets, and the central bank has no instrument to accommodate demand for reserves via open market policy. Second, in a largely cash-based economy, regulating a small part of reserve money (bank reserves) will not be very effective in steering liquidity in the economy. Third, the large informal economy

reduces the role monetary policy can play in influencing cost conditions in financing for economic activities and more generally reduces the scope and reach of monetary policy.

A longer-term challenge Myanmar will have to face is the likelihood of growing currency inflows. Developing countries are usually prone to substantial inflows of foreign currency relative to the size of their economies via a range of channels. Remittances are one possible source, as are exports of natural resources and foreign aid. In the case of Myanmar, the former two are substantial, while the latter is likely to increase in the future with the on-going political transformation and the settlement of its international arrears. Private capital inflows are another potential source of currency inflows that are likely to increase. For now, only foreign direct investment is progressively being promoted. However, other forms of capital imports (such as portfolio investment flows and flows through cross-border banking) may become an issue in the future though they are still small or non-existent given the absence of securities markets and the very limited presence of foreign banks in Myanmar.

Currency inflows pose macroeconomic challenges for the recipient countries. If they stem from foreign portfolio investment or pass through cross border banking they can cause short-run instability as they can be reversed any time. This is not much of an issue in Myanmar at present, as noted. However, even if inflows are relatively stable, they pose longer-term challenges such as the emergence of Dutch disease. This may take the form of an appreciation of the equilibrium real exchange rate, undermining international competitiveness and squeezing domestic production of tradable goods (typically manufacturing) through various channels. Tradable sector profitability will be reduced through higher wages, and skilled labour will be drawn into the non-tradable sector. The higher price of non-traded goods further hurts traded good sector competitiveness if the former serve as input to the latter.

The relevance of the Dutch disease in developing countries is mixed. In an economy where labour is flexible or abundant, small changes in the real exchange rate (i.e. the relative price level of non-traded versus traded goods) will suffice to satisfy whatever additional demand is created for non-traded goods, so the loss in competitiveness will be limited. Even so, activity in tradable industries would be eroded, and the trade balance would deteriorate, making the economy more dependent on external financing. There are possible offsets, depending on the source of the inflow. Specifically, foreign aid or foreign direct investment can raise productivity if it increases the availability of skilled labour or is conducive to the transmission of new technology. The upshot is that policy in the recipient country should aim to ensure that financial inflows, whatever their source, serve the build-up of its productive capacity.

Monetary and exchange rate policy can also help to stem a Dutch disease, provided certain conditions are met. Many emerging and developing economies manage their exchange rate to counter upward pressure on it as part of an export-based growth strategy. This will work only if the liquidity created through exchange intervention, and the associated demand impetus, is sterilised. Otherwise the real (as opposed to the nominal) exchange rate will still appreciate and produce a Dutch disease. Successful sterilisation requires that the central bank has the appropriate instruments at its disposal to carry it out and that foreign currency enters the formal markets initially. It also requires that any upward pressure on yields stemming from sterilisation does not in turn attract further (portfolio) investment inflows from abroad.

At this point, this set of conditions is not met in Myanmar as securities markets are non-existent and bank lending rates are not market-based. Moreover, Myanmar operates

tight capital controls. If it keeps those in place while developing markets for securities and foreign exchange – as appears to be the intention – in principle it could successfully run a managed exchange rate regime to underpin an export-based growth strategy. It is important though that whatever foreign exchange does flow in (including through remittances and foreign direct investment) is channelled to productivity enhancing activities, as noted above. It is also essential that occasional bouts of instability in inflows once the capital account is gradually opened can be absorbed. This requires that macro-prudential regulation is up to the mark, a lender-of-last resort function of the central bank well-established, sufficient foreign exchange reserves have been built and are well-managed and sufficient fiscal space is available to deal with major shocks.

A sound fiscal policy framework is crucial for macroeconomic stability as well as development

Sustainable public finances are key to macroeconomic stability as the experience in many countries has shown. A combination of relatively high public indebtedness, (growing) dependence on foreign capital, widespread informality and poverty and an associated limited revenue raising capacity, and a large dependence on resource revenues are a potentially dangerous combination now facing Myanmar. At the same time, there is a structural need for public funding of infrastructure development, poverty relief, education and health care. All this suggests that a thorough fiscal strategy is crucial for the sustainable development of Myanmar's economy.

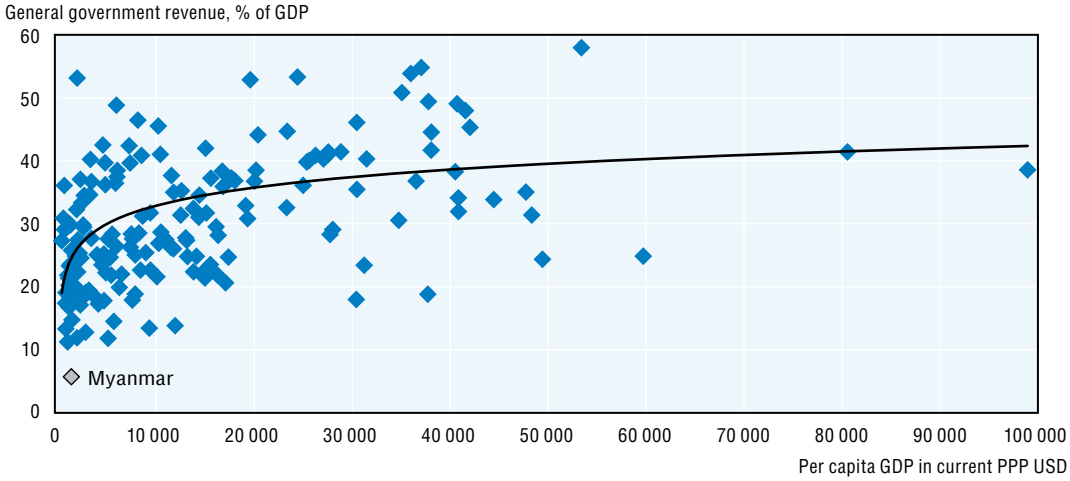
The general government deficit is estimated to have been averaging around 2.5% in the past decades, but it has been on an upward trend recently. The CBM has largely monetised the deficit in the past decade, a practice that is progressively being wound back. The authorities aim to keep the fiscal deficit constant at 5% of GDP, which should normally be sustainable at current levels of public debt and growth. However, Myanmar's public debt level, at around 50% of GDP, is high by international standards for emerging market economies, and therefore a reason for concern. This is not an acute problem as long as the capital account is relatively closed, but sustaining such a high debt level may prove more challenging when the capital account is opened and Myanmar will depend more on (potentially more volatile forms of) capital imports. The country's commitment to settle its arrears with official creditors may further increase the challenge. A potential risk is that tight conditions in international financial markets, once they occur, could spill over to financing conditions in Myanmar and render its public debt unsustainable.

Against this backdrop, it is important that the government enhance its revenue-raising capacity, not least also because there is an urgent need to expand government expenditure in a range of areas, most prominently education, health care, poverty relief and infrastructure (roads, ports and energy). Moreover, the spending structure is heavily tilted towards defence, which is estimated to have been reduced to below 15% of total outlays in 2012/13, but which according to some sources may still be as high as 30% if implicit military spending by other ministries is taken into account.[6] In contrast, spending on education and health is a meagre part of the budget (see Box 2.10 on education spending).

The tax-to-GDP ratio stands at 3.6%, among the very lowest in emerging Asia. While the government also has relatively stable sources of revenues from remittances of profits by state-owned enterprises and royalties from offshore gas fields,[7] total general government revenues are only around 6-7% of GDP according to estimates by the IMF – an estimate which is very low by international comparison even when controlling for per capita GDP (Figure 2.3).[8]

Figure 2.3. **Myanmar's government revenue is low for its income level**

Government revenue and per capita GDP, 2011



Note: The y axis is limited to 60% to improve the readability of the figure. The countries that have general government revenue more than 60% of GDP are Brunei Darussalam, Iraq, Kiribati, Kuwait, Solomon Islands, Democratic Republic of Timor-Leste and Tuvalu.

Source: IMF (2012a), *World Economic Outlook* (database), International Monetary Fund.

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An opportunity to increase government revenues is offered by the abolition of the dual exchange rate system, as this increases the (remittance of) profits of certain state-owned enterprises (SOEs) active in international trade, who can now exchange their foreign earnings against a much higher, market-based, dollar exchange rate.[9] Obviously this also means that the government forfeits a profit on foreign exchange dealings with the SOEs, so on balance it is unclear by how much this would affect the fiscal position. But the incentives that may be produced by the new exchange regime will spur SOEs efficiency and profitability, although for now many SOEs are still loss-making. A proper and transparent accounting for natural resource revenues stemming from all types of resources is also expected to boost government revenues.

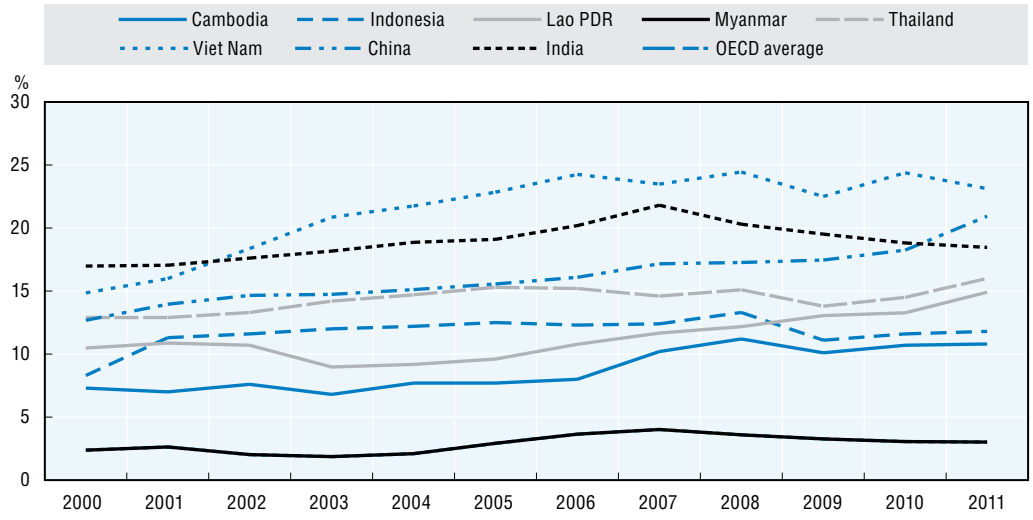
Improving the capacity of Myanmar to raise taxes thus looks essential for funding of sorely needed public expenditures. A strong tax system is also essential to create adequate fiscal space in the pursuit of macroeconomic stability, for instance by allowing tax smoothing and the operation of automatic stabilisers and reducing dependence on natural resource revenues. Myanmar's exceptionally low level of tax revenues compared to other countries in its region (Figure 2.4) is due to a number of salient features of Myanmar's tax system, which it has in common with other South-East Asian economies but are even more prominent in Myanmar.

One of these salient features is that personal income taxes are levied on only a small fraction of the population, those with the highest incomes, since compliance would be too heavy for the poor and too expensive to achieve relative to their potential yield. Similar considerations limit the scope for business taxes. Interviews with the private sector suggest that compliance is extremely weak with even larger companies getting away without paying taxes. Anecdotal evidence shows that collected corporate taxes are even less than collected taxes on car imports. Income/profit taxes and consumption taxes make up the bulk of tax and duties receipts, while the share of excise taxes is negligible (Figure 2.5). The tax collection system in Myanmar is still in its infancy. The use of tax exemptions, preferences and subsidies for poverty reduction or to promote

FDI further limit the tax base (the alternative of levying higher taxes and spending the revenues on infrastructure development may be the better alternative). As a result, tax revenues are always lower than those that would be theoretically collected if legislated tax rates were applied uniformly and fully collected.

Figure 2.4. **The share of tax revenue has been low**

Total tax revenue as percentage of GDP, 2000-11



Note: Data refer to revenues of central government, except for China and India, where data refer to general government.

Sources: ADB (2012a), *Key Indicators for Asia and the Pacific 2012*, Asian Development Bank, www.adb.org/publications/key-indicators-asia-and-pacific-2012; CEIC (2013), *CEIC* (database); IMF (2012a), *World Economic Outlook* (database), International Monetary Fund; and OECD (2013a), *OECD Public Sector, Taxation and Market Regulation* (database), http://stats.oecd.org/.

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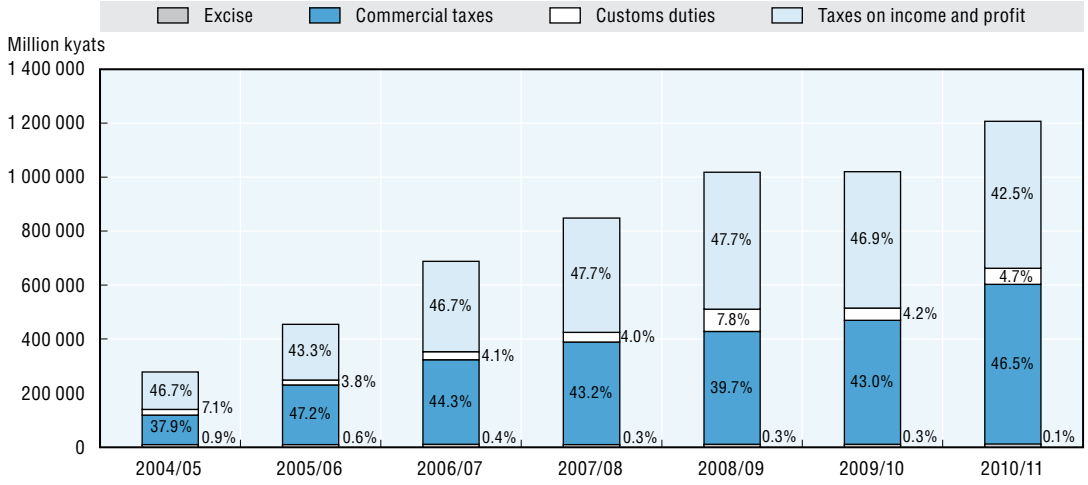
Figure 2.5. **Income, profit and business activities are major sources of government tax revenues**

2004/05-2010/11



Note: The numbers in the bars are percentages of total taxes and duties.

Source: CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar.

StatLink *http://dx.doi.org/10.1787/888932857425*

Another salient feature is the absence of a value-added tax. Currently, Myanmar operates a commercial tax with a standard rate of 5% levied on domestically produced goods, imported goods and 14 services. For commercial taxes there is a minimum threshold of 10 million kyats (slightly above USD 11 000 at April 2013 exchange rates), below which there is no need to file taxes. In small towns most businesses fall below this threshold. At present there are no resource taxes, only royalties levied at 12.5% (changed recently from a previous 10%). Although the standard rate of the commercial tax is 5%, rates can be anything between 0% to 200% (on luxury items only) but the average rates on non-luxury items are between 5% to 30%. A property tax exists at the municipal level.

Capital and current budgeting is done at the Ministry of National Planning and Economic Development and the Ministry of Finance, respectively. This division of labour between the planning ministry/agency and the Ministry of Finance is not unique. A number of countries including Bhutan, Brunei Darussalam, China, Mongolia and Turkey follow this pattern. A typical issue that arises in this setting is co-ordination between the two agencies, in particular in the case of projects comprising both capital and current spending elements. In some cases, capital budgets may get approved without the current part of the project or vice versa. In Myanmar, such projects are vetted by a committee comprising the line ministry, the Ministry of Finance and the Ministry of National Planning and Economic Development. It appears that co-ordination among the three concerned ministries is effective.

A reform of the tax administration is underway, with the establishment of new tax offices, training of tax inspectors and collectors, the introduction of a unique tax ID number, and the set-up of a system of self-assessment, all with technical assistance from the IMF and the European Union. A large taxpayer unit is planned to be established by 2015 to monitor about 1000 taxpayers from a few locations in the country. In 2016, a medium taxpayer unit and in 2017 a small taxpayer unit will be established.

The on-going fiscal decentralisation will mean that states and regions can raise their own taxes. The scope of such taxes is determined by the constitution, but the base and the rates are set freely by the state/regional government conditional on the approval by their own parliament. Examples of taxes collected at the sub-central level are excise and property taxes. Much investment, including FDI may go into border areas or areas inhabited by minorities where there are major natural resources (e.g. minerals and hydropower), which raises questions of how to share the benefits. There is neither a tax sharing nor a fiscal transfer system in place.

All in all, the agenda for fiscal reform in Myanmar is vast. The pursuit of this agenda, along with reform of the banking sector and the establishment of a framework for monetary and exchange rate policy, may be expected to yield large benefits in terms of both longer term sustainable growth and near-term stability, two objectives that are tightly intertwined and mutually reinforcing.

Ensuring the rule of law

Another area in which institutional capital is important in Myanmar is the rule of law. In any country, ensuring that both the government and the people are bound by the rule of law is crucial for the country's sustainable development. Accumulation of the institutional and social capital essential to development is severely impaired when the rule of law is weak. Strengthening of the rule of law is even more important in

Myanmar, where during the past decades arbitrary power had often been applied. The importance of addressing this issue is highlighted by the establishment of a Committee on the Rule of Law, Peace and Stability in August 2012 in the Lower House of the parliament chaired by Daw Aung San Suu Kyi. The major mission of the Committee is to review existing legislation from the point of view of substance and necessity as well as conformity with international practices, to inquire into the way tribunals operate and to consider ways to improve legal education. The lack of the rule of law in some parts of the country has impeded the government's efforts to provide major public goods, such as security, justice, and other services and to secure the conditions for economic livelihood. Moreover, the lack of the rule of law has largely contributed to the rapid and very often uncontrolled depletion of the nation's natural wealth and has provided an opportunity for abuse by those in power. This has been made possible due to a lack of supremacy of the law, as well as to a lack of voice, accountability and transparency. In the context of accumulating social capital, improvements in voice, accountability and transparency can also be viewed as elements to develop among people and between people and institutions (see section "Building trust for inclusiveness" in Chapter 3).

Reform efforts to strengthen the rule of law and overhaul key legislation are proceeding

At the core of the conception of the rule of law is the principle of the supremacy of the law, which implies that no one, not even the government, is above the law. To establish the supremacy of the law after decades of resorting to arbitrary power, the separation of powers is needed. The legislative power has been handed over to a parliament with elected deputies that have been active in exercising their power. The separation of the executive and judicial powers has been less effective and the independence of the judiciary is compromised (Box 2.3).

Box 2.3. **The separation of powers in Myanmar**

The effective separation of executive, legislative, and judicial powers is a critical component of good government and an essential part of Myanmar's political development. As a result of its extended period under military rule, Myanmar does not have a history of having strong and independent legislative and judicial branches. Recent trends suggest they are becoming more active under the new constitution, though the executive remains quite powerful and the interdependence of the branches is somewhat unclear, leading to conflict.

History

Following its independence from the United Kingdom in 1948, Burma adopted a Westminster-style bicameral parliament that elected the president, with a constitution providing for an independent judiciary. After the military overthrew the civilian government in 1962 and suspended the constitution, it ruled through the Union Revolutionary Council. There was no meaningful separation of power in the country during this period, as the Council disbanded the legislature and gradually took over control of the judicial system. Indirect military rule formed the basis for the 1974 constitution, through which the legislature was re-established as the one-party unicameral Pyithu Hluttaw, controlled by the Burma Socialist Programme Party, which also controlled the judiciary. After seizing direct control of the state again in the 1988 coup, the military suspended the constitution and ruled through the State Law and Order Restoration Council and the State Peace and Development Council from 1997 onward.

Box 2.3. **The separation of powers in Myanmar** *(cont.)*

Under domestic and international pressure, from 2008 the government followed through with reforms designed to transition the country to "disciplined democracy," which included renewed checks and balances on the power of the executive branch through the legislature and judiciary.

Current situation

The current constitution, drafted by the largely pro-military National Convention and approved by almost 94% of voters in a widely-criticised referendum in 2008, states that the three branches of government are "separated, to the extent possible, and exert reciprocal control, check and balance among themselves." Since the end of January 2011, when the new constitution came into force, it has in practice given the president significant powers over parliament and judges.

The executive powers reside solely with the president, who is elected by parliament for a five-year term that may be renewed once. The president selects the Cabinet, except for the ministers of Border Affairs, Defence, and Home Affairs, which are selected by the military. The president has far-reaching powers of appointment and oversight, rarely constrained by intermediary independent agencies, and a strong role in budget decisions. The president and military can claim expansive powers by declaring a state of emergency.

Both the Pyithu Hluttaw and Amyotha Hluttaw, the two houses of the parliament, are made up of three-quarters elected representatives and one-quarter military appointees. The legislature has been criticised as being a rubber stamp for government bills; parliamentarians lack the staff, committees, and central structures needed to support the drafting of legislation, and so have mostly voted on bills proposed by the government. The judicial system consists of the regular court system, headed by the Supreme Court, and the Constitutional Tribunal, which is responsible for hearing disputes regarding the interpretation of the constitution.

Judicial independence

The justice system is more independent of government influence than it was under military rule and has responsibilities to check the power of the executive and legislature, exercised through Supreme Court orders regarding fundamental rights and the Constitution Tribunal's powers to review legislation. Nevertheless, the work of judges is subject to political interference by the president and parliamentarians. Lower court judges are appointed and could possibly be dismissed by the president, rather than an independent organisation, and judges on the Supreme Court and the Constitutional Tribunal can be impeached by the parliament. Although the Constitutional Tribunal had twice given rulings that limited executive powers, in 2012 it sided with the president and against the legislature in deciding that a number of legislative committees were not entitled to special budgets and legislative powers. In response, the parliament voted to impeach the tribunal, and the nine judges chose to resign.

In addition to the formal constraints on judicial independence, the proper functioning of the system is threatened by the limited legal capacity of judges (International Bar Association, 2012). Some reviewers have expressed concern that the history of government involvement in the courts may have left Myanmar with judges unused to working under legal norms and practices rooted on the rule of law. On the Constitutional Tribunal, these problems are exacerbated by the relatively short five-year terms served by these judges, which could prevent the development of expertise on constitutional matters.

Box 2.4. **The on-going legislative overhaul**

Several dozen new laws and amendments have been passed by the Pyidaungsu Hluttaw since the legislature was convened in January 2011. Below are some examples of the new laws:

- Labour Organization Law (2011)

  Grants workers the right to join and resign from labour organisations, and outlines the rights and responsibilities of these groups during normal operations and during lock-outs and strikes.[a]
- Settlement of Labour Disputes Law (2012)

  Outlines the roles of arbitration bodies and the responsibilities of workers and employers in labour disputes.[b]
- Environmental Conservation Law (2012)

  Calls for the establishment of an environmental conservation committee, which will advise the government on environmental matters. The committee is also made responsible for making rules for industry and for setting various environmental quality standards.[c]
- Administration of Vacant, Fallow and Virgin Lands Law (2012)

  Calls for the establishment of a central committee that will manage the commercial use of unused lands, and sets limits on the amount of land the committee can grant applicants the use of. It also outlines the responsibilities of the recipients of these lands and the conditions under which the government can reclaim it.[d]
- Foreign Investment Law (2012)

  Provides a list of the business activities in which foreigners will be allowed to engage, specifying: *i)* restricted activities for foreigners; *ii)* activities only allowed in the form of a joint venture with Myanmar nationals, with indication of the maximum foreign shareholding permitted; *iii)* activities allowed under certain prescribed circumstances and conditions; and *iv)* activities allowed only following an Environmental Impact Assessment and minimum investment levels, and requires increased use of local staff for skilled positions.[e]
- Import-Export Law (2012)

  Tasks the Ministry of Commerce with defining regulations on trade, issuing permits, and banning trade in particular items.
- Ward or Village Tract Administration Act (2012)

  Includes a specific definition of forced labour and provisions relating to its prohibition and to the punishment of perpetrators of forced labour under the Penal Code. This act replaces the repealed Village Act and Towns Act of 1907.

Notes:

a. English text: The Labour Organisation Law, 11 October 2011, Online Burma/Myanmar Library (2011), www.burmalibrary.org/docs12/Labour_Organization_Law%20No.7-2011-ocr-red(en).pdf (accessed March 2013).

b. English text: The Settlement of Labour Dispute Law, 28 March 2012, Online Burma/Myanmar Library (2012), www.burmalibrary.org/docs13/Labour_Disputes_Settlement_Act-2012-en.pdf (accessed March 2013).

c. English text: The Environmental Conservation Law, 30 March 2012, Asian Environmental Compliance and Enforcement Network (202), www.aecen.org/sites/default/files/environmental_conservation_law-english_.pdf (accessed March 2013).

d. The Administration of Vacant, Fallow and Virgin Lands Law allows for vacant, fallow, and virgin lands to be leased for up to 30 years (renewable) and the Foreign Investment Law broadly allows foreigners to lease land from the government or private owners for up to 50 years (extendable for two additional ten-year periods). The Administration of Vacant, Fallow and Virgin Lands Law requires that foreigners leasing these lands must have been permitted to do so in accordance with the Foreign Investment Law, but otherwise does not address this discrepancy. English text: The Administration of Vacant, Fallow and Virgin Lands Law, 30 March 2012, Online Burma/Myanmar Library (2012), www.burmalibrary.org/docs13/VFVLM_Law-en.pdf (accessed March 2013).

e. Summary: Global Legal Monitor (2012), "Burma: Amended foreign investment law published," www.loc.gov/lawweb/servlet/lloc_news?disp3_l205403415_text (accessed March 2013).

The observation of the principle of the supremacy of law presupposes a consistent and comprehensive system of laws. The foundations of a modern legal infrastructure are being laid and this process is advancing at a breath-taking speed (Box 2.4). The most fundamental legal document is the Constitution, the latest approved in 2008. The Constitution grants the President broad powers including budgetary decisions and the nomination of senior legal officials and members of the Electoral Commission. The reformist government has been adopting new laws at an overwhelming speed. Dozens of domestic and foreign lawyers and policy makers have been providing advice and inputs into the new legislation. The speed at which new laws are passed often makes it difficult to ensure consistency among the different laws, which may result in conflicts. For example, the terms of land rights defined in the Farm Land Law and the Foreign Investment Law are not consistent.

Steps have been taken in providing support for voice, transparency and accountability

The reformist government that came into power in 2011 has made significant progress in establishing the major principles reinforcing the rule of law such as voice, accountability and transparency. Citizens have been enjoying more freedom to express their views either directly or through participation in elections, or the civil society. In the area of participation, a major change is the introduction of elections at the village level in December 2012 following the passing of the *Ward or Village Tract Administration Law*. With this change, village administrators are now elected throughout about 30% of the country. By-elections in 2012 also allowed citizens to express their choice for their deputies and their choice was respected. Other major achievements in the area of participation of citizens are a still nascent but rapidly expanding civil society and emerging fora for citizens' voice. For example, recently, the government has been encouraging people to report bribery cases and offering protection for those who speak up. There is still ample room for improvement, however, in the areas of rights such as the right to own property and be compensated at a reasonable level for land acquired by the government, the right to establish and register associations or lobby groups and the right for farmers to grow crops of their choice. The government is also making progress in addressing the issue of forced labour, putting in the necessary legislative base through the *Ward or Village Tract Administration Law* (2012). By accumulating institutional capital supporting associations, property rights and other institutions and empowering the people to speak up against unlawfulness or abuse, the government can also build trust and strengthen its legitimacy.

Measures have also been adopted to increase transparency by capturing the momentum from the transition from a military to a civilian administration. Live debates at the parliament are the most obvious manifestations of increased transparency. The press and the media are increasingly active in presenting views of different interest groups and in uncovering issues that used to be taboo for public discussion in the former regime. These include reports of graft and money laundering as well as of human trafficking and forced labour. In an important step, Myanmar ratified the UN Convention against Corruption. A further needed step to increase transparency is to increase involvement of the general public in the discussions related to new laws or regulations as well as in the uncovering of unlawful business activities. A more active audit office, an independent competition authority and independent scrutiny of budgetary issues are necessary ingredients of transparent governance systems.

Continuous commitment towards increased transparency is a precondition to accountability. Myanmar has begun the process of joining the Extractive Industries

Transparency Initiative. Genuine election processes at both the Union and sub-national levels strengthen government accountability as the representatives may not be re-elected if they do not represent the interests of their electorate. Answerability, alongside enforceability, is a crucial pillar of government accountability. The government has become responsive to people's voice and has introduced measures to enhance its accountability to the electorate. An important milestone is the fight against corruption. A nine-member anti-corruption committee was formed with the leadership of the Vice President, showing the importance of the issue as well as the determination of the government to address it. The press and the media, together with the civil society, have been used as tools to hold the government accountable.

Enforceability has also seen improvements in the recent years. People can increasingly get their voice heard and the government is responsive to cases such as those involving the abuses of labour standards and land rights. Even more importantly, it can effectively be held accountable for its wrongdoings through stronger enforceability. The resignation of top government officials on corruption charges is a sign of enhanced enforceability and a commitment to clean government. Thus, the social contract between the government and the populace connoting the rights and responsibilities of each appears to be beginning to function. An additional aspect is accountability between the privileged and the poor, which needs strengthening to increase the perception of social justice and thus enhance the legitimacy of the government. This would include, for instance, the revisiting of uncompensated or insufficiently compensated land appropriations, not only by the government but also by business conglomerates and tycoons.

Voice and accountability can potentially be strengthened by the devolution of powers to sub-central government units. The preconditions for federalism to enhance voice and accountability are effective local institutions and well-trained local officials, as without those it is difficult to execute local-level plans and to implement policies. In addition, the extent of devolution of powers, including revenue-raising powers, is an important determinant of the impact of decentralisation on participation, voice and accountability.

Effective federal relations will be key to reconciling ethnic tensions

Myanmar is a federation of seven states and seven regions (with some further special administrative rights of varying degrees for some lower level administrative units). The continued insurgencies over the history of independence and historical promises to ethnic groups suggest that equitable treatment of all ethnic groups is the only viable option for a unified and multi-ethnic country. Ethnic groups' dissatisfaction with the administrative structure of the country and with the effective division of power between the centre and the ethnic states has been often expressed as armed rebellion since the country's formation in 1948. The 1947 Constitution provided ethnic states with some autonomy, but the system was not a federal one in the classic sense as the government of Burma, the major part of the country, was simultaneously also the government of the Union of Burma, encompassing all ethnic territories. The first Constitution also included a secession clause (Article 10) that allowed the states to access a secession process beginning ten years after Myanmar achieved independence.

Subsequent legal changes made no further progress with regards to the distribution of powers between the central government and sub-central entities. Not only was the secession clause abolished, but demands put forward by ceasefire groups in the mid-2000s concerning federal style division of powers were ignored. Some ethnic organisations that signed ceasefires with the regime (notably the Kachin Independence Organisation

and the New Mon State Party) had been invited to join the National Convention, whose task was to prepare a new Constitution. Having seen their demands dismissed, ethnic organisations did not see the military government as a supporter of their efforts to strengthen their self-determination. The National League for Democracy, the major opposition party (not invited to join the National Convention) was not more supportive of ethnic autonomy, either. Its stance has been to resolve ethnic matters by mutual agreement, on the basis of the ability of each group to participate. The views of exile groups both from the opposition fighting for democracy and ethnic groups demanding genuine federalism, appeared more shared. In such circles, democracy and federalism were seen as mutually reinforcing processes to pursue.

While it is a broad consensus that there is only a narrow range of constitutional arrangements that would satisfy ethnic demands, the ideal form of federalism is hard to define. History has proved that any kind of notional federalism that lacks effective devolution of powers will not work. Although the first Constitution offered some degree of autonomy, it provided for no more than a quasi-federal system, with few effective rights for minorities for self-determination. That is how the Supreme Council of the United Hills Peoples (SCOUHP), aimed at establishing a genuine federal system, emerged shortly after independence. Minorities demanded the right to establish their own legislative, judiciary and administrative powers within their national states and the right of self-determination and secession. At present, Myanmar states and regions can establish their own parliaments and Constitutions. Legislatures at the state level that were brought into life by the 2008 Constitution are new elements appearing for the first time in the Myanmar federal system. Expectations for federalism to contain ethnic conflicts are high, but it may take time to find the appropriate type of federalism for Myanmar.

The complexity of ethnic issues related to the multiplicity of ethnic groups combined with the autonomy aspirations of several of those groups suggests that existing federal practices in other countries (Box 2.5) may not provide a model to follow for Myanmar. Some kind of a federal structure seems inevitable but the feasibility of either a purely multi-national or a strictly territorial federal structure appears low. Basing self-determination on nationality is complicated owing to the multiplicity of nationalities in the country (in Myanmar ethnic groups are referred to as nationalities), while organising autonomous regions strictly based on geographical principles and promising equal rights to all citizens would not sound credible to nationalities that have felt oppression over the past decades. Also, a territorial system works well where there are no national identity issues, which is not the case in Myanmar. Furthermore, at the current stage of devolution of powers to states and regions, hybrid federalism, which is an essentially unitary system, does not appear an attractive choice, either. A possible direction is multi-national federalism starting with the nationalities that have the aspiration and the capacity to determine their own affairs and leaving room for late-comers to join the league of autonomous states and regions. A two-pronged approach based on the present practice of granting autonomy at multiple-levels of administration (at the state/region, at the division and at the district level) would allow tailoring powers and responsibilities to the size and capacity of the particular ethnic group demanding autonomy.

A "genuine" federalist system for Myanmar would involve the effective devolution of powers to the states and regions, both for self-determination and revenue collection. Self-determination involves setting legal rules and administering economic and social affairs according to the needs of the population in the state or the region. This would allow for building of ethnic groups' identities, preserving and developing their national languages

and cultures and organising the employment of available resources in a sustainable way. To finance such needs, an effective devolution of revenue raising powers will be needed, involving tax sharing arrangements negotiated in a transparent and fair way between the centre and sub-central regions and states; as well as the freedom to establish the regions' own revenue sources and to collect taxes and fees in a way that is considered most appropriate and efficient given the state's or region's particular conditions.

Box 2.5. **Multi-national, territorial or hybrid federalism?**

Federalist systems across the globe are organised on the basis of nationality (multi-national federalism) or geographical region (regional or territorial federalism). In the former case, territorial autonomy is typically granted for a nationality with the right to self-determination and to preserving of national identity. Examples of multi-national federalism include Spain and Canada. Regional federalism grants equal rights to all citizens and autonomy is based on regions, which are formed irrespective of the boundaries of ethnic groups. Examples are Australia and the United States.

In Asia, hybrid federalism is often seen as most appropriate to deal with minority issues and national identity questions (He, Galligan and Inoguchi, 2007). This may be because of failed attempts to impose a federated union upon former British colonies in the era of nation building as well as unsuccessful attempts to build homogenised nation states in the following decades. Following decolonisation, most Asian countries first sought to build unitary and homogenising nation states. Countries facing national identity questions, resistance amongst ethnic or religious minorities or even civil wars, in contrast, had more been in favour of federalism. Early attempts at federalism failed in some countries like Myanmar or Sri Lanka, while federalism has been functioning well in India and has been emerging in Indonesia and the Philippines. In particular, the latter two countries have implemented a more hybrid type of federalism, where federal elements are introduced to some parts of the country but the centre and the main body of polity remains a unitary system (He, Galligan and Inoguchi, 2007). In Indonesia, the 2005 peace agreement resulted in religious self-governance of the Acehnese as well as an attractive revenue-sharing agreement of oil and gas revenues with the central government. In the Philippines, the 1987 Constitution granted autonomy to regions in Mindanao over a number of affairs including revenue raising powers, economic and social affairs and education policies.

Hybrid federalism emerges where a unitary system is not sustainable owing to autonomy aspirations of one or a few nationalities or ethnic groups. It allows the preservation of the unity of the nation-state while solving ethnic conflicts. It has been credited as capable of effectively dealing with secessionism and ethnic division. Stability and peace, however, are often achieved at the expense of inter-ethnic equality. In the case of multiple ethnic groups, the granting of autonomy to one may encourage others to follow suit and demand similar privileges.

The distribution of powers between the federal government and the regions, which is the essence of federalism, is safeguarded by the Constitution. Bicameral legislatures are typical features of federalist countries, where the second house can represent regional interests in federal politics. In Myanmar, there are two houses of parliament with equal power. An independent constitutional court is an indispensable ingredient of a functioning federal system, as it is the authority that deals with any conflict between the federal government and any state/regional government. In Myanmar, the separation

of powers between the legislative, the executive and the judiciary does not have a long history. Thus the independence as well as the capacity of the constitutional court will need to be strengthened to ensure a functioning and credible federal system.

More important than the formal institutional setting is how federalism functions in practice. Practice matters because constitutional provisions may be ignored, or the state/region may not have the capacity to fully exploit the rights for self-determination that is guaranteed by the constitution or, conversely, federal practices may go beyond constitutional provisions. Since its existence as a unified country, Myanmar has not had a genuine federal system. Although the first Constitution granted some degree of autonomy to the initial states/regions, the autarchic rule from 1962 prevented the shaping of federal relations. Also, the next Constitution of 1974 only granted notional autonomy to the newly added states. The 2008 Constitution has in principle enabled regions to determine a large amount of their internal affairs, but so far there has been little progress in this area. Many of the regions may face capacity constraints in designing their internal governance structures. Moreover, to satisfy demands of ethnic groups, more autonomy in self-determination is desirable. This could be done through parliamentary debates and the changing of the relevant clauses of the Constitution, which would likely be a lengthy process. Another alternative would be to focus on putting in place federal institutions and experimenting with available structures before finding the most appropriate one and subsequently incorporating that structure into the Constitution. Given the lack of experience with a functioning federal system, it would be easier to try some potential alternatives before institutionalising any one type of federal relations.

Federalism can only work if the delicate balance between the demand for regional autonomy and the choice to maintain unity is well struck. In contrast, if unity is achieved at the expense of regional autonomy, by the suppression of local autonomy, then secessionist movements may emerge over time and put an end to the unity of the country. By the same token, if the demand for regional autonomy is so high that it does not leave room for national unity, federalism cannot work, either.

Building the institutions for environmentally sustainable development

Setting up the institutional framework for effective conservation and sustainable exploitation of Myanmar's natural resources will be key to the country's development goal of becoming a middle-income country over the next two decades. Myanmar's exceptionally diverse and rich forest, land, water, and mineral resources have been the main support to the domestic economy and will continue to be of major importance as the economy diversifies. However, Myanmar's natural resource endowment presents challenges and risks as well as opportunities. Avoiding costly mistakes in resource exploitation and ensuring that resources are used efficiently and sustainably will depend critically upon skilful development of the organisational, legal, and regulatory institutions for sustainable development, which are now in a very early stage of development.

Environmental resources have been degraded by population pressure and commercial demands. Myanmar's early stage of economic development has helped to limit the damage to its environment and natural resources in certain areas. Industrial pollution is less severe than in most other developing countries in Asia, but mainly because of the comparatively limited development of industry and low income levels.

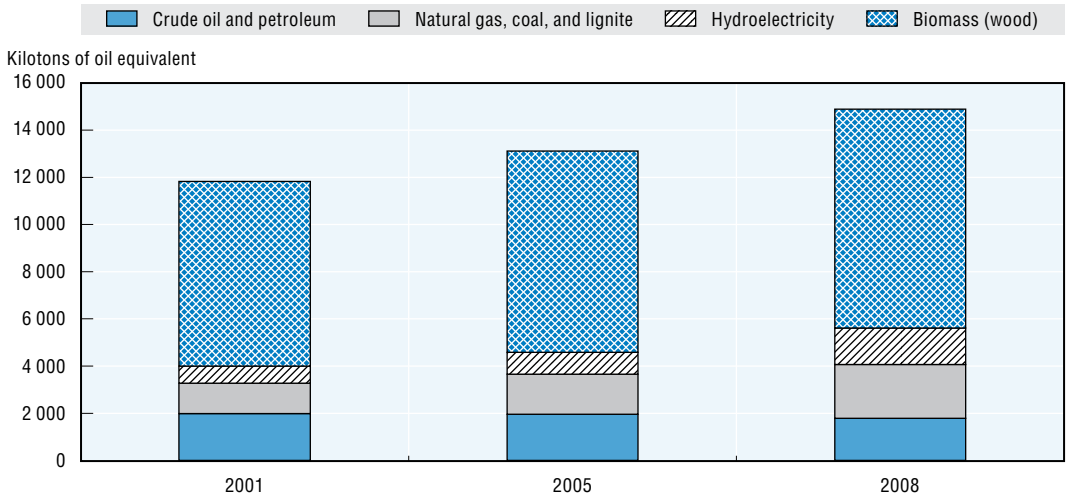
However there has been substantial degradation of forest, land, and other key resources on which the country's development will continue to depend.[10]

Myanmar's forests have shrunk noticeably since the economic reforms beginning in 1988. The total forest area fell from 39.2 million hectares in 1990, or about 58% of the country's total land area, to 31.8 million hectares, or 47% of total land, in 2010. This amounts to a decline of nearly 1 percentage point annually over the twenty year period. Deforestation was most rapid from 1990 to 2000 (about 1.17% annually) but has dropped only modestly since 2000 and accelerated slightly during 2005-10. Deforestation has been greatest in regions with relatively high population density and high economic growth and where the forests have comparatively high commercial potential. The portion of land covered by forests fell by nearly 40% to 50% in the Yangon, Mandalay, and Ayeyarwady divisions between 1989 and 1998, a decline of 5% or more per annum (ADB, 2008). The rate of deforestation in less densely populated (mainly) northern regions, notably Bago, Kachin and Rakhine states, and the Sagaing division, has been slower overall but damage to commercially viable species has often been severe.

Severe poverty and the growing population together with over-exploitation for commercial purposes have been the main factors behind the shrinkage of Myanmar's forests (Sovacool, 2012). The relentless need to meet the subsistence needs of the growing rural population has led to progressive encroachment on forests from agricultural activities and growing demands for forest products by rural households, including firewood, which is the main source of heating and cooking fuel for both rural and urban households (Figure 2.6). These pressures have been reinforced by the comparatively simple and often inefficient techniques used for cultivation, which have often led to deterioration of the productivity of the land. Similar forces have also led to degradation of water and other environmental resources in Myanmar's coastal and river regions. Mangrove forests have been degraded by the growth of the shrimp industry and rice cultivation. The need to provide livelihoods for the growing population has led to over-fishing and threats to the viability of key marine species.

Figure 2.6. **Biomass accounts for most energy consumption in Myanmar**

Primary energy consumption



Source: Ministry of Energy, Myanmar.

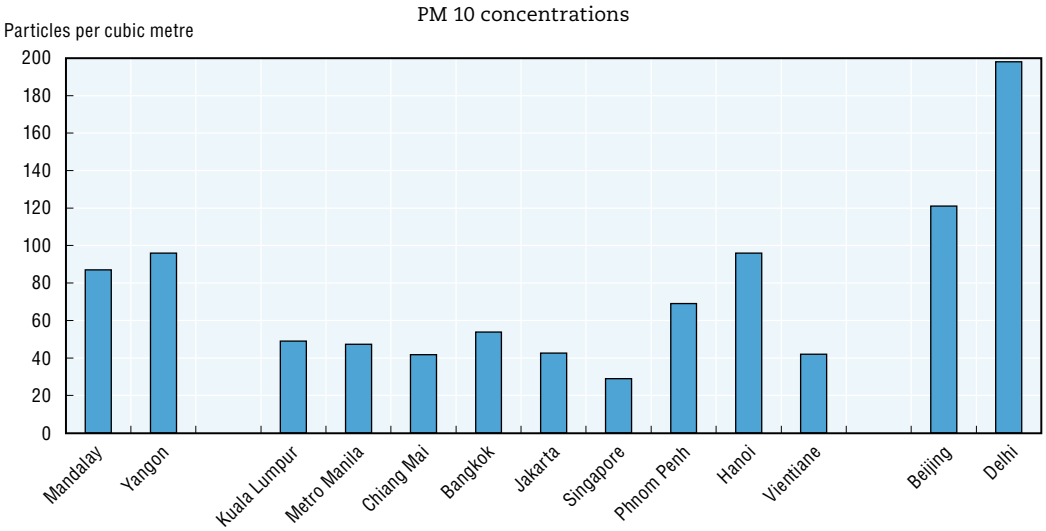
StatLink http://dx.doi.org/10.1787/888932857444

Pressures from the growing population have also contributed to significant degradation in land resources, especially in some regions. Nearly 10% of cultivated land is estimated to be at elevated risk from soil erosion (ADB, 2008). Most of this land is in the hilly and mountainous regions (mainly) in the North, where 42% of the population lives. Vulnerability to erosion has been aggravated by over-use of the land beyond its sustainable capacity driven in large part by population pressure. Population pressures along with natural factors have also degraded soils in other parts of the country. Land classified as "problem soils" amounts to about 5% of total cultivated land according to official estimates (ADB, 2008). Soil quality is undermined by salinity in delta and coastal regions, alkalinity and acidity in dry and laterite soil areas, respectively, and seasonal flooding in low-lying areas.

Illegal exploitation and trade have further contributed to environmental degradation. The strong commercial incentives to exploit forest resources, both from within and outside the country, have led to extensive legal and illegal over-cutting and over-logging. Mining operations, whose scale has increased greatly over the past two decades, have caused extensive damage to land and water resources, especially in northern mountainous regions, from the use of hazardous materials, cutting of forests, and use of techniques such as open pit mining (Burma Environmental Working Group, 2012). Mining and the extraction and transport of oil and natural gas have also led to displacement of local villages to make room for their operations. Commercial exploitation of mineral resources at the expense of environmental conservation has sometimes been encouraged by government policies emphasising resource development.

Figure 2.7. **Air pollution is severe in large cities**

PM 10 concentrations



Source: Pandey, K. D. et al. (2006), "Ambient particulate matter concentrations in residential and pollution hotspot areas of world cities: New estimates based on the Global Model of Ambient Particulates (GMAPS)", *The World Bank Development Economics Research Group and the Environment Department Working Paper*; and WHO (2013), *Database on outdoor air pollution*, World Health Organization, http://www.who.int/gho/phe/outdoor_air_pollution/exposure/en/index.html (accessed 19 March 2013).

StatLink *http://dx.doi.org/10.1787/888932857463*

Myanmar's cities have been facing challenges of solid waste management (SWM) and dealing with air pollution. There have been significant improvements in SWM in the two major cities, notably in the portion of waste collected, but SWM in other cities has improved very little and remains poor overall (ADB, 2008). Air pollution in Myanmar's

two major cities is among the highest for major cities in developing Southeast Asia (Figure 2.7). The comparatively high level of air pollution reflects both the increase in the number of motor vehicles as well as the predominant use of low octane fuels suitable for the motorcycles and other lower power vehicles.

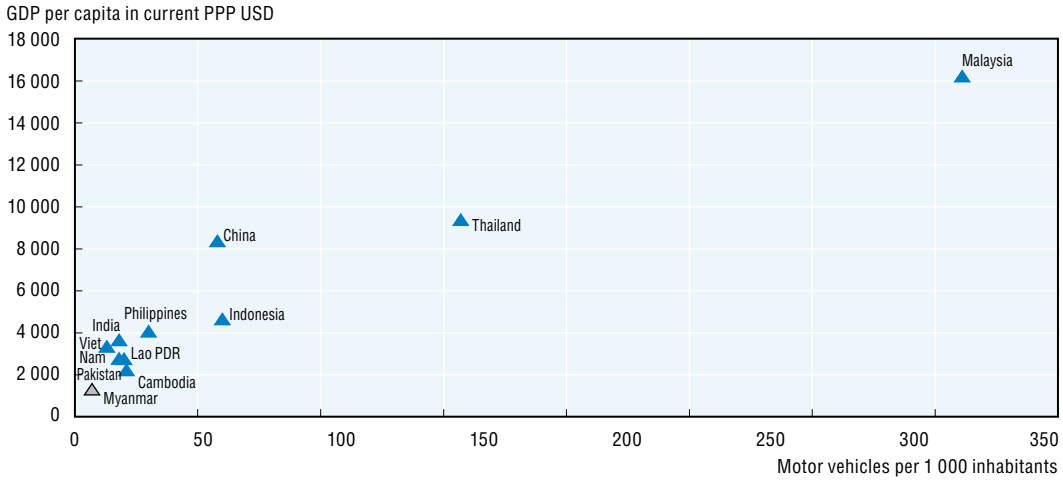
Pressures on natural resources will increase and new challenges are likely to emerge

Overall, the deterioration in Myanmar's environment is a reflection of the intense and rising competitive pressures engendered by the needs of the growing population, demands from domestic and foreign business, and internal development policies of the government – pressures that have overwhelmed the government's limited capacities to manage. These pressures will almost certainly increase and new challenges will emerge as its development accelerates.

The growth of industrial activities, which now accounts for slightly less than 20% of GDP (2010/11), along with the further development of agriculture, will both increase the amount of waste and pollution that needs to be managed and broaden their sources. Water and land pollution from industrial sources has been relatively limited in Myanmar but experience in other developing countries indicates that it can easily become a major problem. Use of chemical fertilisers and pesticides, which has until now been fairly limited, is likely to increase greatly as the agricultural sector develops, posing potentially severe risks of pollution to water resources and bio-diversity.

The experiences of other developing countries, notably China, highlight the risks that rapid development will lead to severe urban air pollution from the use of coal for power generation, industrial activities, and motor vehicles. Myanmar's hydropower and natural gas reserves will help to reduce the first of these risks. However, motor vehicle use in Myanmar accelerated sharply in the first decade of this century and the pattern of other developing countries indicates that it is likely to accelerate further as per-capita incomes rise (Figure 2.8).

Figure 2.8. **Motor vehicle density is likely to increase with income rising**



Source: IMF (2012a), *World Economic Outlook* (database), International Monetary Fund and World Bank(2013a), *World Development Indicators* (database), http://databank.worldbank.org.

StatLink *http://dx.doi.org/10.1787/888932857482*

The opening of the country to FDI and to the domestic private sector will pose major challenges of balancing the need to develop the resource and industrial sectors with the requirements of sustainable development. The challenges are likely to become acute nearly immediately: FDI into the energy and other key resource sectors is expected to surge over the medium term and will be essential to their development. However, the institutional capacity to ensure that natural resource exploitation is sustainable and consistent with environmental goals is currently very under-developed.

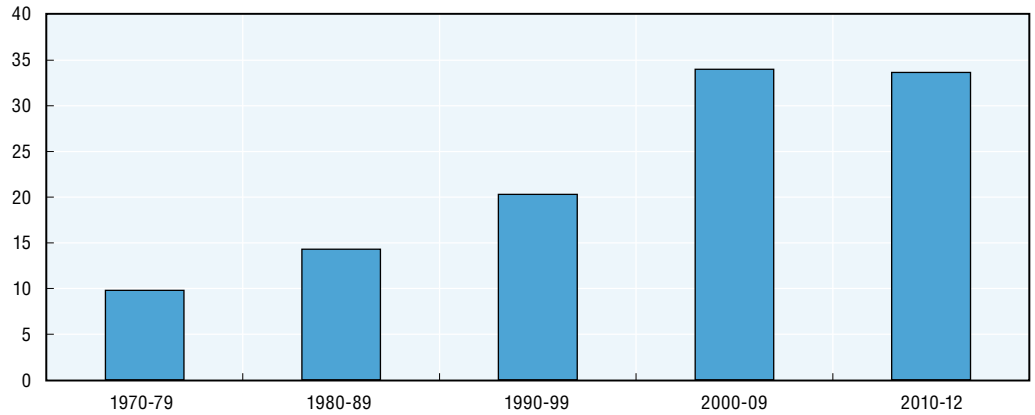
Development of dams and other water control infrastructure also poses significant challenges of balancing economic development with sustainability objectives – as the fierce controversy over the construction of the Ayeyarwady Dam has highlighted. Dams and related infrastructure are essential to meeting increasing water needs, the development of Myanmar's hydropower potential, and to dealing with the risks from natural disasters and climate change. However, as other major projects in Southeast Asia and elsewhere have illustrated, large-scale dam projects pose potentially serious environmental risks that can be difficult to assess and that require sophisticated planning and evaluation capabilities from government authorities if they are to be effectively managed.

Climate change poses further challenges

Long coastlines and heavy concentration of population near the coasts along with high dependence on agricultural and natural resources have made Southeast Asian countries especially vulnerable to the effects of climate change (IFAD, 2009; Zhuang, Suphachalasi and Samson, 2010). The effects of climate change are already becoming manifest, notably in a significant increase in the number of major storms and floods to hit the region over 2000-08 compared to the numbers experienced in each of the prior four decades (Figure 2.9).[11] Climate simulations suggest that the region as a whole could experience as much as a 4.8°C average temperature increase by 2100 as compared with 1990 and be subject to a 70 cm rise in sea level. Overall precipitation is expected to increase by 2100 but its pattern is likely to shift, with Thailand, Viet Nam and Indonesia likely to experience drier conditions over the next two to three decades (Zhuang, Suphachalasi and Samson, 2010). Melting of snow and ice in mountainous regions could reduce water flow in major Southeast Asian river systems, increasing stress on water supplies.

Figure 2.9. **Extreme storms and floods are increasing in the region**

Yearly average number of extreme storms and floods in Southeast Asia



Note: Totals for Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Viet Nam.

Source: Centre for Research on the Epidemiology of Disasters (2013), *International Disaster Database*, www.emdat.be/disaster-list (accessed 13 March 2013).

StatLink *http://dx.doi.org/10.1787/888932857501*

These changes will have widespread and substantial effects on the region's economies and ecosystems (Zhuang, Suphachalasi and Samson, 2010).

- Access to safe and secure water supplies is likely to become more difficult. By one estimate, 3.9 million people in Thailand and 8.4 million in Viet Nam are expected to experience water stress by 2050.
- Rice yields are likely to fall substantially, by as much as 50% in Thailand and Viet Nam and even more in the Philippines, in the absence of technological innovations and adaptation.
- Adaptation to higher temperatures is likely to significantly alter the composition of the region's forests toward species with lower carbon absorbing capacity than at present.

Myanmar's coastal and delta regions are likely to be particularly affected by the increase in tidal variations in sea level and in the frequency and intensity of tropical cyclones accompanying global warming. These changes, together with the increase in rainfall, increase the risk of flooding as well as coastal erosion and heightened water salinity in upstream rivers and streams. Within the Southeast Asian region, the delta regions of Myanmar, Thailand, and Viet Nam are particularly at risk as are low-lying areas of Indonesia, the Philippines, and Malaysia (IFAD, 2009). Increases in sea levels could also degrade access to water in regions adjacent to coasts through salt-water intrusion into freshwater supplies.

Capabilities for adaptation and resilience to disruptions will need to be incorporated into sustainable development strategies and plans if the adverse effects of climate change are to be adequately managed and mitigated. Failure to develop these capabilities is likely to reduce real growth and set back progress toward reducing poverty.

International experiences show that environmental and broader development policies need to be integrated

Up until about the 1970s, issues of environmental conservation and resource management in most countries were either neglected or treated in a piece-meal fashion and, particularly in developing countries, were subordinated to the imperatives of achieving rapid growth and industrial development ("grow first, clean-up later"). The costly environmental problems arising from this approach, and the growing realisation of the implications of global warming, have led to progressively increasing emphasis on the integration of environmental objectives and policies in the formulation and implementation of broader economic policies and development plans.

The ultimate goal of this process is to 'mainstream' environmental objectives in order to achieve the "*…informed inclusion of relevant environmental concerns into the decisions of institutions that drive national, local and sectoral development policy, rules, plans, investment and actions*" (OECD, 2012a). The need for mainstreaming reflects the fact that environmental objectives are particularly interdependent with other key social and development objectives. For example, policies for sustainable development of forests in Myanmar and other Southeast Asian countries have a direct impact on the outcomes of policies to reduce rural poverty and the development of mineral and other natural resources. Policy formulation and implementation needs to be integrated to balance the objectives in these areas and to avoid unnecessary conflicts among them.

Achievement of mainstreaming is an on-going process that is far from complete in even the most advanced economies. The ways in which environmental objectives are 'mainstreamed' into overall development policies and decisions in any particular country need to be shaped by its institutional and governance capacities and to adapt as these capacities change. Efforts to achieve effective integration of environmental and broader development policies have had to struggle with several key challenges.

- Creating an effective legal framework and government organisations for mainstreaming. Effective co-ordination of policy decisions and their implementation across government agencies and other organs at both the national and local level is key.
- Designing effective instruments to achieve environmental objectives most efficiently.
- Involving non-government actors – the business sector, households, and civil society – in the formulation and implementation of environmental policies in order to improve their design and to strengthen incentives for environmentally beneficial behaviour.

Effective co-ordination across government organs is essential to environmental policy

Nearly all developing countries, including those in Southeast Asia, have progressively upgraded the importance given to environmental issues and have sought to improve the organisational structures for achieving environmental objectives and for co-ordinating them with broader economic goals and policies. In a number of Asian countries, the government's obligation to protect the environment is stated in the constitution. Most Southeast Asian countries have drafted Agenda 21 strategies for sustainable development. These mandates have at the least helped to upgrade the visibility of environmental issues in government policy and to provide an overarching "vision" for environmental conservation strategies and the mandate for their integration into development policy-making.

First line responsibility for environmental policies is now usually vested in a separate ministerial level agency primarily focused on environmental issues, such as the Ministry for Natural Resources and the Environment in Thailand and Viet Nam, the Ministry of the Environment in Cambodia, and the State Environmental Protection Agency in China. This represents a significant upgrading of the priority given to environmental issues compared to several decades ago when those issues were often assigned to sub-offices of ministries with much broader mandates. Environmental objectives and policies to achieve them are incorporated, to varying degrees, in national development plans.

Despite these improvements, there is widespread agreement that the effectiveness of the organisational structures in integrating environmental with other development policies has been less than needed, for several reasons (Dalal-Clayton and Bass, 2009; Habito and Antonio, 2007; OECD, 2012a; UNESCAP, 2003). Ministries responsible for key sectors, such as energy or transport, along with major "policy" government organs, such as the planning ministry (or board) and the finance ministry traditionally have had the major influence over national policy-making and in the formulation of national development plans. Environmental considerations are generally of lower priority to these major agencies than economic development and the key sector priorities specified by national development plans (e.g. to improve and extend the national power grid).

This tendency is reinforced by the fact that many of the basic laws and instruments are largely sector-specific in nature. Moreover, the technical abilities of these ministries to take account of environmental considerations are often limited (UNESCAP, 2003). The environment ministries, although they have the technical expertise to formulate specific environmental policies, generally have insufficient expertise about other areas to perform an effective co-ordinating function.

A number of mechanisms are used to try to deal with the co-ordination problem. Several Southeast Asian countries have inter-agency committees to oversee preparation of the national development plan along with, in some cases, a separate inter-agency committee on environmental issues or sustainable development (UNESCAP, 2003). For example, the Committee for Planning and Development in Lao PDR, and the Technical Working Group on Planning and Poverty Reduction in Cambodia are responsible for co-ordination of national planning in their respective countries. The National Environment Board (NEB) in Thailand recommends policies and plans for environmental enhancement and prescribes environmental standards. However the co-ordination between the two organs tends to be limited. The national planning agency often is not represented on the inter-agency environment committee or board and planning agencies and inter-agency committees often rely on environment sub-units within the sector ministries for inputs on environmental issues.

Links between the inter-agency planning and environment co-ordinating organs are stronger in the Philippines, where the Secretary of the Department of Natural Resources and the Environment is a member of the Board of the National Economic and Development Authority, which chairs the Philippine Council on Sustainable Development. In general, such inter-agency organs are most effective when led by one of the highest level officials, as in Thailand where the Prime Minister chairs the NEB. The National Councils on Sustainable Development (NCSD) that have been established in a number of Southeast Asian countries also have been used in part to improve co-ordination and integration of environmental objectives and policies (see the discussion later in this section).

Environmental Impact Assessments (EIA) and *Strategic Environmental Assessments* (SEA) have been extensively used in OECD countries and increasingly in developing countries as a means of incorporating environmental considerations in economic policies. EIAs are typically used to assess the environmental implications of specific projects or plans, for example the construction of a dam. EIAs have tended to be applied after a plan is formulated and focus on identifying their direct environmental impacts (for example, the impact of construction of a dam on local water supply).

SEAs comprise a set of analytical tools and participatory approaches to integrate environmental concerns into government plans, policies and programmes and to assess their interrelations with broader social and economic development goals. For example, SEAs can be used to assess the implications for environmental objectives of regional development strategies; or of a proposed reform of energy subsidies and the risks that the reform will have unintended consequences (OECD, 2012a). SEAs include EIAs as a tool but typically are applied at an earlier stage of the planning process and with a broader and longer perspective.

An increasing number of developing countries have been constructing SEA frameworks to improve their mainstreaming of environmental objectives (Box 2.6). SEA programs in Asian developing countries are most advanced in China and Viet Nam but are at various stages of development in the majority of other Southeast Asian countries,

including several of the lowest income countries (Lao PDR and Cambodia) (Dusik and Xie, 2009). SEAs are significantly more demanding in terms of strategic capabilities, technical expertise, and information than EIAs (which are demanding enough) and need to be developed over time and adapted to country capacities.

Box 2.6. **Strategic Environmental Assessments (SEAs) in China and Viet Nam**

China began to develop a framework for the implementation of SEAs in the mid-1990s as a means to broaden the scope of its EIAs beyond consideration of direct environmental impacts. The revised Environmental Impact Assessment Law that took effect in 2003 mandated inclusion of SEA elements in environmental assessments. The Law requires that environmental assessments be prepared as part of plan formulation (rather than after the plan has been formulated as is often the case with traditional EIAs) and (in the case of sector plans) that the assessment be carried out by outside experts. The Law also requires consultation with other concerned institutions and actors, including the public. SEAs have been applied to a wide range of areas, including regional and urban development plans, industrial sector plans, and land use plans.

In Viet Nam, the revised Law on Environment Protection (LEP) that took effect in 2006 mandates the application of SEAs to national socio-economic development strategies and plans; regional development plans; plans for land use, forest protection and development; and plans concerning the exploitation of inter-provincial water and other natural resources. Although at an earlier stage of development than in China, SEA pilot projects are being applied to a growing number of sector and regional development plans. The major government agencies involved in development have been working since 2008 on means to implement and evaluate SEAs, as well as to improve inter-agency co-ordination in their preparation and implementation.

Viet Nam has used SEA tools to assess the environmental, economic, and social implications of the Quang Nam Hydropower Plan (2006-2015) incorporating nearly 60 separate large-scale projects (Dalal-Clayton and Bass, 2009). The SEA involved both local and national stake-holders and focused on four strategic concerns: integrity of eco-systems; water supply; impacts on ethnic minorities; and economic development in Quang Nam and Da Nang provinces. The SEA identified a number of adverse implications of the plan that threatened its overall sustainability; and made a number of recommendations for improvement, some of which were subsequently adopted by the government.

Effective and efficient instruments are key to attaining environmental objectives

The implementation of environmental policies requires effective instruments to affect the actions of economic actors whose activities may have adverse environmental impacts. These instruments are of two basic types: *command* instruments (CIs) that directly prescribe standards or prohibit harmful actions; and *market-based* instruments (MBIs) that use market signals or other economic incentives to affect behaviour which has an impact on the environment.

Examples of CIs are limits on pollution emissions by industrial factories or by motor vehicles; minimum water quality standards that must be sustained by water authorities; or limits on the amount of timber that can be cut from forests. MBIs include

environmental taxes and equivalent (ETIs, i.e. taxes and subsidies on environmental emissions, user or other fees, and tradable permit schemes – see OECD, 2011). They also include: license, concessions and quota schemes used to manage exploitation of natural resources; payments for environmental services; and certification or labelling systems for environmentally friendly products or services.

CIs are the most widely used environment instruments in OECD and developing countries. They have the advantage being relatively easily understood and applied and of achieving (if enforced) a specific environmental goal, such as the maximum of air pollution in a city. However their effectiveness depends on mechanisms for enforcement, for monitoring of compliance, and on systems to produce the information needed to assess the global effects on the environment and to set standards. Command instruments can require considerable technical expertise to set appropriate standards and may need to be changed frequently to adapt to changing circumstances (UNESCAP, 2003). A major drawback of command instruments is that they tend to achieve their environmental goals inefficiently. This is because they generally require all actors to meet the same standards without taking account of the fact that some actors can do so at lower cost than others (OECD, 2011).[12]

MBIs place all or part of the cost of the environmental damage onto the source of that damage or allow those who engage in environmentally beneficial behaviour to share in the benefits. For this reason, MBIs tend to improve the efficiency of achieving a given environmental objective compared to command instruments. For example, with a tax on factory pollution, producers that face lower costs of abatement will reduce their emissions more than those facing a higher cost; and the total costs of attaining a given global amount of pollution reduction will be lower than with a command instrument. MBIs also are better at encouraging investment in innovations to more efficiently reduce pollution or to use natural resources. ETIs have the further benefit of raising revenues that can be used for other socially beneficial purposes.

Skilfully designed MBIs can be very effective

MBIs, especially ETIs, often require more developed institutional capacities than command instruments to be effective. For example, successful imposition of a tax on factory pollution requires a reasonably well developed and efficient system for business taxation and means to enforce compliance. Because they operate less directly than command instruments, the effects of MBIs on their objectives are less certain and for that reason their design can be more demanding in terms of information and technical expertise. Some environmental taxes, such as those on fuel, can impose unacceptable burdens on poorer households unless alleviated by reduced income or other taxes, which can be difficult to implement when tax systems are in an earlier stage of development.

These reasons largely explain why MBIs, especially ETIs, have been little used in most developing countries. Environmental taxes are mostly confined to excise or other taxes on automobiles, and Singapore and Thailand are the only countries in the region that presently tax gasoline (OECD, 2011). A number of countries in the region subsidise rather than tax home fuel use (mainly) in order to support poorer households. However, the use of ETIs has been growing and is likely to increase further as institutional capacities improve. Notably, Viet Nam instituted a general environmental tax in 2011 that applies to a wide range of fuels and lubricants, as well as certain herbicides, pesticides, disinfectants and preservatives, and plastic bags.

Experiences within the region also illustrate that MBIs and other policies that rely on economic incentives can be both beneficial and feasible if they are carefully adapted to the situations to which they are applied and to a country's institutional capacities. Instruments that combine environmental conservation with income generation for households are likely to be particularly effective (Sovacool, 2012).

Payments for eco-system services (PES) have been used in a number of developing countries to promote sustainable management of forests, marine, water and other natural resources. These involve payments to landowners, businesses, or individuals for providing environmental "goods" such as clean water, control of soil erosion, or the sustainable exploitation of forests. Some PES schemes involve direct, contracted payments to owners or custodians of environmental resources by those deriving benefits from them. Such arrangements require reasonably well defined property rights and identification of the beneficiaries. More often, the payments under PES schemes are made by governments through NGOS on behalf of the beneficiaries. China has used PES extensively to protect its watersheds and to reduce erosion. In 2008, Viet Nam began a pilot project to promote protection and conservation of forests whose results so far have been fairly encouraging.

Certification and labelling (CAL) can also be used to provide a positive return to compliance with environmental standards. Products that are certified as free of environmental contaminants or produced by environmentally friendly processes can sell at a premium and in some cases have wider access to export markets (where importing countries give preferences to goods that meet environmental standards) than those that are less environmentally friendly. Certification schemes have been applied in a number of developing countries, including Myanmar, to agricultural areas or forests that adhere to specified standards for environment-preserving practices. Effective CAL schemes require standards for compliance, means to verify that the standards are complied with, and labelling or certification of that compliance – all of which can be costly to producers if not effectively designed (OECD, 2012a).

Finally, governments can also harness economic incentives to promote environmental goals by allowing commercially oriented businesses to provide certain environmental services, by incorporating environmental considerations in public procurement decisions, and by encouraging "green" social enterprises (OECD, 2012a). For example, using private companies or private-public partnerships in water treatment, allowing them to charge for their services, can improve efficiency and encourage users to reduce their use of polluting substances. Experiences in India, Brazil, and other developing countries have demonstrated the potential benefits of "social" enterprises that, with the right enabling conditions, can be commercially successful while pursuing environmental objectives (e.g. the provision of alternative energy sources).[13]

Involvement of non-state stakeholders and local communities is essential

Effective environmental policies and their integration cannot simply be a top down process whereby the government initiates and other actors simply react. Businesses, households, and civil society organisations involved in environmental conservation make most of the concrete decisions that affect the environment and they need to understand the objectives and rationale of environmental policies. Involvement of these non-state actors in policy-making and implementation can increase their perceived stake in the policies' outcome. Government policy makers must understand the conditions and needs of these actors to design policies that have the intended effects. Households

and businesses that are involved in environmental policy decisions are likely to be more aware of their rationale and of their own stake in the decisions' outcomes. However the role of non-state actors needs to be well defined and supported by an enabling environment that allows and encourages their participation if they are to be effectively involved in environmental policy-making.

Most developing countries have created National Councils on Sustainable Development (NCSD) to involve non-state actors in the planning, formulation, and implementation of environmental policies and their integration with broader development policies (UNESCAP, 2003).[14] The Councils bring together officials from government ministries and agencies and representatives from the business sector, labour organisations, NGOs, and other non-government stakeholders. In most cases, including those in Southeast Asia, the Councils have an advisory rather than direct decision-making role.

The Philippines NCSD illustrates the important contributions the Councils can make as well as some of their limitations (Box 2.7). As with inter-government co-ordinating bodies, the Councils tend to be most effective when there is active participation by very high government officials, where they have high visibility so that non-state actors participate at a high level, and where the division of authority with other government co-ordinating organs is clearly defined (OECD, 2011).

Box 2.7. **The Philippine Council for Sustainable Development**

The Philippine Council for Sustainable Development (PCSD) was established by Presidential decree in 1992 as a mechanism for realising the country's goals for sustainable development and their integration into national development plans, policies, and programmes, in accordance with the Philippines "Agenda 21" (PA21) strategy. The Council serves as an advisory body to the National Economic Development Agency (NEDA), the country's main planning agency, on the integration of environmental concerns into broader economic policies. The mandates of the PCSD include: the formulation of the PA21; the incorporation of the Agenda's objectives into major government plans, including the medium-term plan; and formulation of the national strategies for bio-diversity conservation.

The Council is chaired by the Director General of the NEDA with the representative from the Department of Environment and Natural Resources serving as vice-chair. The council includes representatives from government ministries and from NGOs, business, and trade unions. The Council meets quarterly with the Philippines President to discuss issues and concerns relating to environmental policies. The Council's mandate is to advise on environmental issues and policies but the responsibility for policy decisions rests with the government ministries, the legislature, and the executive branch.

The main strengths of the Council are first that it provides a high visibility forum for identification and discussion of environmental issues in the context of broader economic and social policies; and second, that it brings together government officials and representatives from private-sector groups with stakes in environmental policies and their outcomes. The Council's effectiveness is constrained by the fact that it can only recommend policies to officials and agencies that still tend (if less than in the past) to view environment matters as of subordinate importance to their central missions. Agencies often designate relatively lower ranking officials to serve on the sub-committees of the Council that carry out its main substantive work.

A variety of arrangements at grass-roots level to involve local farmers, villagers, and other actors in the formulation and implementation of environmental policies have been found to significantly enhance environmental conservation efforts and promote their integration with other economic imperatives (Sovacool, 2012; OECD, 2012a). These arrangements typically involve participation of local stakeholders in the management of local forests, agricultural lands and other resources together with government experts and NGOs, who provide training and other support (see next section for some examples). Community involvement draws on the expertise of local stakeholders about the detailed conditions of the eco-resources they depend on, while increasing their knowledge and capabilities to sustainably exploit those resources. Such arrangements often offer local actors the prospect of increasing their income as they improve their management of the resources, which makes the government policies better understood and more acceptable. However, effective community engagement arrangements depend on a number of requirements: identification and selection for participation of those local actors best placed and motivated to manage the resources; well-trained government staff to provide the training and technical advice; and co-ordination with NGOs and other actors involved in local environmental issues.

Myanmar's legal framework and institutions for environmental policy are at an early stage

Myanmar's recent opening gives it the opportunity to construct institutions for environmental conservation and its integration with broader development policies somewhat ahead of the emergence of the severe environmental problems that have accompanied rapid industrialisation in other countries. The decisions of the new government to suspend several major infrastructure projects (in part) to allow more time to consider their impacts on the environment and local residents have provided a promising indication of the government's commitment to sustainable development. However, there are also serious risks that the currently weak institutional setup will, if not rapidly strengthened, be overwhelmed by the expected take-off in development and resulting intensifying competition for access to the country's resources among the population, local and foreign businesses, and government policies.

Myanmar has laws addressing key environmental domains and policies, including laws on forestry, mining, the protection of wildlife and natural habitats, and the conservation of water resources and rivers. It adopted an overall National Environmental Policy Law (NEPL) in 1994. The country is also a signatory to a number of international conventions on environmental protection and has adopted an "Agenda 21" strategy for sustainable development.

However, the legal framework that has governed environmental policy is dated and reflective of the predominant emphasis until recently on state domination of the economy and the priority on agricultural development and natural resource exploitation. The laws, including the NEPL, mainly spell out aspirations and broad goals but provide limited specific direction as to how they are to be achieved (Sovacool, 2012). There are important gaps in the laws coverage: for example they do not cover pollution, provide for formulation of environmental standards in some key domains, or for EIAs (BEWG, 2011).

The authorities have recognised the need to modernise the legal framework for environmental conservation and its integration with broader development goals and have taken a number of important steps toward these goals over the past five years. The new constitution adopted in 2008 specifically mandates that the government shall "….protect and conserve the natural environment…" and empowers the national

legislature to enact laws to achieve that objective; local governing bodies are empowered to enact environmental laws for their jurisdictions, subject to their consistency with national law.

The new Environmental Conservation Law (LEC) first proposed in 2011 and enacted in 2012 represents a very important step toward establishing a firmer legal foundation for more effective environmental policies and their harmonisation with broader development objectives (Box 2.8). The final Law represents a revision of the 2011 draft in response to suggestions from international NGOs and other groups.

Box 2.8. **The New Law on Environmental Conservation (LEC)**

The LEC represents a significant strengthening of the original version proposed in 2011 in response to critical comments from NGOs and other outside observers (Thein, 2012; BEWG, 2012). Under the LEC, the Ministry for Environmental Conservation and Forestry (MOECAF, formerly the Ministry for Forestry) is given broad responsibilities for formulating, promulgating, and implementing policies in a full range of environmental domains. Specific responsibilities include: implementation of environment conservation policies and development of national and local environment management plans; formulating environment quality standards for water, air, solid waste and other environmental domains; and specification of hazardous wastes and promotion of development of facilities for their treatment. MOECAF is also tasked with the development and implementation of systems for monitoring pollution; for EIAs and Social Impact Assessments (i.e. SEAs); for advising other relevant government organs on urban land use and other policies affecting the urban environment; and with formulating policies and recommendations for "economic incentive instruments" and other means to charge polluters for environmental damage and other actors who benefit from environmental services.

MOECAF is given responsibility for designating what types of industrial operations will require prior approval before setting up operations (i.e. to assure that they conform to environmental and other regulations). It is also given the power to recommend (in most cases) that other government departments cease from taking actions or implementing policies that would cause harm to the environment.

The LEC mandates the establishment of the Environment Conservation Committee (NECC, presumably as successor to the earlier NCCE), to develop overall strategies for environmental conservation and enhancement and to co-ordinate those policies across the government. The NCEE is chaired by a Minister designated by the government with "suitable members", presumably from other government agencies (although these are not specified by the LEC itself). The NCEE is given the power to identify policies by government agencies that harm the environment and to recommend (in most cases) to the government that they be stopped.

The new Law addresses the full range of environmental domains. It gives the Ministry of Environmental Conservation and Forestry (MOECAF) extensive authority to formulate policies for environmental conservation, including environmental standards and development of systems for monitoring pollution and other environmental hazards. The Law addresses most of the key gaps in previous legislation and provides authority to develop more market-based environmental instruments and lays the basis for the use of EIAs. It also provides for a mandate for co-ordination and integration of environmental policies with policies pursued by other government agencies (see below).

Overall, the LEC provides a good legal foundation and basic framework for improving the effectiveness of Myanmar's environmental policies. However other key laws on the environment will need to be amended (or replaced) and some new laws enacted if the framework is to be effectively implemented. In particular, a law on EIAs and SEAs will be needed to actualise the LEC provisions on these policies. A number of the authorities specified in the Law, such as the regulation of private industry and charges and sanctions for pollution are likely to require further elaboration through legislation.

Mechanisms to co-ordinate environmental and other policies are limited

Government organisation of environmental policies in Myanmar reflects the strong sector focus typical of most developing countries. The key sector ministries formulate and implement specific environmental policies directly affecting their areas of responsibilities. For example, the Ministry of Livestock, Breeding and Fisheries is responsible for marine and freshwater fisheries management; the Ministry of Agriculture deals with environmental issues in the agricultural sector; while the Ministry for Road Transport regulates vehicular emissions. Responsibility for certain issues is shared among several government agencies; for example, urban and rural water development policy responsibility is divided among the Ministry for Irrigation, water resource utilisation departments at the local level, the Yangon and Mandalay city development committees, and a number of other agencies (ADB, 2008).

Unlike most other countries in Southeast Asia, Myanmar does not have a dedicated Ministry or separate high-level agency to formulate economy wide environmental policies and to co-ordinate their integration with other policies (ADB, 2008). The National Commission on Environmental Affairs (NCEA), created in 1994, and now (since 2005) lodged with and chaired by the Ministry of Forestry, serves as the lead body on environmental conservation. The Commission includes member-representatives from other government ministries and agencies. The NCEA is responsible for formulating overall environmental policies (including environmental standards, standards for natural resource exploitation, and for pollution control) and has a co-ordinating mandate to promote environmental policies that balance environmental needs with other development objectives. It has responsibility for the formulation and implementation of Myanmar's Agenda 21 strategy for sustainable development.

The ability of the NCEA to carry out its assigned roles, particularly for co-ordination, has been severely limited by its comparatively low status among government agencies, its lack of direct authority to intervene or participate in environmental policy formulation by sector Ministries, and by limited technical and staff capacities due in part to its very limited budget (Habito and Antonio, 2007; Sovacool, 2012). For much of its life, the Commission seems to have been focused on relations with international donors and agencies rather than domestic policy, as indicated by the fact that until 2005 it was lodged in the Ministry of Foreign Affairs and chaired by the Foreign Affairs Minister. Participation in the NCEA is often of limited priority for sector ministries, who not infrequently designate lower ranking officials as members of the key NCEA sub-committees responsible for specific policies. Co-ordination of the NCEA with the Ministry for National Planning and Economic Development (MNPED) also has been limited, with NCEA providing little input into the formulation of the National Plans while the MNPED had little involvement in the formulation of the country's Agenda 21 plan (Habito and Antonio, 2007).

The fragmented and weakly co-ordinated division of responsibilities for environmental policies has led to conflicting priorities, duplication, and gaps that have limited their overall effectiveness. In some areas, there have been too many actors

working at cross-purposes. For example, the Forestry Ministry's authority to manage and protect mangrove forests is sometimes in conflict with the Fisheries authority's mandate to regulate shrimp farming (ADB, 2008). In other areas, there has been no clear responsibility for other important issues, notably air and water quality standards. The overall result has been a subordination of environmental conservation to sector priorities that has aggravated environmental problems in forestry, agricultural, and water resource domains.

In an effort to improve co-ordination and integration of environmental policies, the Government established the National Coordinating Commission for the Environment (NCCE) in 2004, with representatives from central government ministries, as well as from local authorities.[15] There are also several other national commissions that have co-ordinating responsibilities in specific environmental domains, notably the National Commission for Water and the National Commission for Combating Land Degradation. The division of responsibility among these co-ordinating bodies is not clear.

The new LEC does not seem to fundamentally change the formal allocation of responsibilities for environmental policy co-ordination and integration. Promotion of co-operation among government organs and with international organisations, NGOs, and individuals is an explicit objective of the Law, which directs the government to form a National Environmental Conservation Committee (NECC) to be chaired by a Minister designated by the government. The overall mandate of the NECC is to mobilise environmental conservation activities in accordance with the overall objectives specified in the LEC. The NECC is given an explicit mandate to work with other government organs on environmental issues and in principle to restrict or prohibit activities or policies carried out by those other organs if they would be harmful to the environment.[16] However the LEC is not clear as to whether the NECC has the power on its own to force compliance by other Ministries or only to recommend to the government that they be restrained.

Formally, the NECC appears quite similar to the NECA (which it presumably replaces) and whether its role will be mainly advisory or become something stronger remains to be determined. The increased visibility and priority given to environmental conservation and its integration into economic development policy, along with the mandate given to the NECC, could potentially lead to a more effective co-ordinating function. As indicated earlier, such bodies tend to be more effective when chaired by a very high level government official, such as a vice-premier or the head of the national planning agency. This possibility is left open by the LEC since it does not specify that the NECC be chaired by the Ministry of Environmental Conservation and Forestry, as has been the case with the NECA (Thein, 2012).

EIAs, SEAs and other instruments need to be further developed and their use expanded

The lack of tools to assess environmental impacts of development policies poses a serious risk that the proliferation of infrastructure projects, development of special economic zones and other development policies over the medium term will interfere with the achievement of Myanmar's sustainable development objectives. Unlike its regional neighbours, Myanmar's present laws do not require the use of EIAs for major projects nor provide a framework and standards for their use. The relatively few EIAs that have been carried out have not always met international best-practice standards (BEWG, 2011).

Completion and passage of the EIA law now under consideration needs to be given high priority, especially since development of the technical, information, and other

capacities to conduct good EIAs will take some time. Procedures and standards for the conduct of EIAs need to be specified in line with international standards, including the circumstances under which EIAs must be undertaken, the factors they must include, provision for public participation in the EIA process, along with effective means for enforcement. Preferably, the EIA process should be designed to provide a foundation for the use of more broadly focused SEAs as soon as possible. Myanmar should be able to benefit from the experiences of other countries in the GMS, who have been improving their EIA and SEA tools for a number of years (Habito and Antonio, 2007).

Direct controls are the overwhelmingly dominant environmental policy instruments now used in Myanmar. Much of the regulation of forests and other areas is applied through the protected forest reserves and other protected areas. The country's forests are largely protected through limits on timber cutting, prohibition in most cases of the shifting of cultivation into the protected reserves, and other regulations. Shifting of cultivation into non-protected forests also requires permission from local authorities. Motor vehicle pollution and solid waste are regulated through direct limits.

A number of factors have limited the effectiveness of the instruments. Enforcement is at best mixed, due in part to limited enforcement staff and their limited training (Sovacool, 2012). As noted earlier, illegal logging and mineral exploitation as well as encroachment of agricultural cultivation into the protected forest reserves is rampant. The potential economic gains from these illicit activities often outweigh the fines imposed for violations (Sovacool, 2012).

The protected areas may be too small for effective forest conservation, at least so long as they serve as the primary means to achieve that end. Until very recently, forests under the Protected Area System (PAS) accounted for about 4% of the land area in Myanmar (Figure 2.10). In contrast, Thailand has adopted a target of placing 25% of the country's land area under protected forests by 2006. The area in Myanmar under the PAS was increased significantly in 2010-11 to 5.6% of the total land area. This is just within the long-standing target of the National Wildlife Conservation Department to place 5% to 10% of the land area under protection within ten years (Sovacool, 2012). Consideration might be given to increasing the protected area further toward the mid-point or upper bound of that range.

Figure 2.10. **Protected forests are still small but increasing**

Source: CSO (2012b), *Myanmar Forestry Statistics (2001-02 to 2010-11)*, Central Statistical Organization, Ministry of National Planning and Economic Development in collaboration with Ministry of Environment Conservation and Forestry, Nay Pyi Taw, Myanmar.

StatLink *http://dx.doi.org/10.1787/888932857520*

There are very few MBIs or related economic incentive instruments presently being applied in Myanmar. The government does provide preferential loans for conversion of motor vehicles to combustible natural gas (CNG) (ADB, 2008). A system of forestry certification has been under development since the late 1990s, based on criteria for sustainable forestry management, although it has not yet been introduced.

The limited use of incentive instruments is not surprising given the limited industrialisation and private sector development, the early stage of development of the tax system, and weaknesses in institutions supporting the effective functioning of markets. The scope for the use of such instruments should increase as the country develops. In fact, the new LEC includes mandates for establishing mechanisms to ensure that polluters pay for environmental damage from their activities and that beneficiaries from environmental resources pay for those benefits.

There are some areas even under present circumstances where the use of economic incentives could be usefully expanded. A number of countries in the Southeast Asian region, including Singapore and Thailand, have turned over waste collection responsibilities to licensed companies in order to attain greater efficiency.[17] Given that solid waste management often consumes a large fraction of municipal budgets in Asian developing countries, most of which is attributable to collection, such efficiency gains can be a significant boost to municipal finances (Asia Productivity Organization, 2007). The solid waste management arrangements in the two major cities in Myanmar seem sufficiently well developed to allow the phased devolution of waste collection to private entities, as well as greater use of fees on waste disposal and other incentives to limit waste accumulation and encourage recycling. Experiences in other countries cited earlier also suggest that payment for ecological services arrangements could be feasible and beneficial in conservation of forests and management of water eco-systems in Myanmar.

Stronger mechanisms for participation by non-government actors could bring substantial benefits

Non-government actors – local communities, NGOs and businesses – are a major resource that if effectively mobilised can greatly increase the chances that Myanmar's sustainable development objectives will be achieved. As discussed below, participation by local communities in the management of local resources has already yielded significant benefits in Myanmar. NGOs have played a major role in supplying resources and technical support for many environmental and poverty-reduction initiatives and are likely to continue to be important in the future. Consultation with the business sector will be necessary to ensure that environmental policies are efficiently designed so that they do not place unnecessary burdens on businesses' ability to compete.

Effective involvement of these non-government actors is likely to require support from the government to strengthen the institutional and social capital necessary to such involvement. Creation of a NCSD to bring together government officials and representatives from the local NGOs, businesses, and community organisations would be a useful step toward improving mutual awareness among the actors of environmental needs and concerns. Local community groups need to be empowered through respect for their legal rights to advocate and advise policy makers on environmental issues.

The predominance of the rural sector in Myanmar's economy and its dependence on forest, land and water resources, makes extensive participation by local communities in environmental conservation essential. A number of experiences with community

participation in Myanmar indicate that the benefits can be substantial. A good example is a programme involving coastal villagers in the sustainable exploitation of the dugong, a marine mammal endangered by over-exploitation and pollution, and training in its ecological needs (Sovacool, 2012). The programme greatly improved the villagers' awareness of the need and means to exploit the dugong in a sustainable fashion and helped to significantly improve the dugong's survival prospects relative to other countries in Asia.

Myanmar's programme of community co-management of forest resources under the Community Forest Instructions, further illustrates the potential benefits as well as some obstacles that need to be overcome. The programme, which began in 1995, has been a key element in the government's forestry management and conservation efforts (ADB, 2008). Under the Instructions, local groups can form Forestry User Groups (FUGs) to work with local authorities and NGOs to supply basic needs for firewood and other forest products from designated local forest areas while carrying out reforestation and other conservation activities.

The experience with the programme has shown that community participation can help to slow deforestation and improve forest management (Sovacool, 2012). The government has set a target of placing 1.5 million acres of forest under the programme by 2030, but is far behind this goal, with only about 100 000 acres of community forests having been established by 2010. In fact, the rate of additions to the community forest (CF) area has slowed to a near stand-still since 2001 (Tint, Springate-Baginski and Ko Ko Gyi, 2011).

The factors behind the slow growth of the community forests illustrate both the requirements for successful community involvement in environmental conservation and the potential obstacles and pitfalls. There has been increasing competition between local communities and business and other foreign interests for access to local forest resources. The higher priority often given by sector government ministries to the latter may have been a factor in the slow rate of approval of applications to set up CFs. Competition for access with outsiders in the absence of legally sanctioned ownership rights by local communities in their forests also seems to have created an incentive in some cases to establish FUGs even when their immediate benefits to the local population are limited. This situation can create unintended problems, for example by creating incentives to encroach on forest outside the CFs or other environmentally damaging behaviour in order to continue to meet subsistence needs. Effectiveness of the programmes has also been compromised in some instances by a tendency to award the property rights in CFs to groups with greater influence with authorities but which may not be as effective as poorer, less influential local groups with closer connections to the forest area.

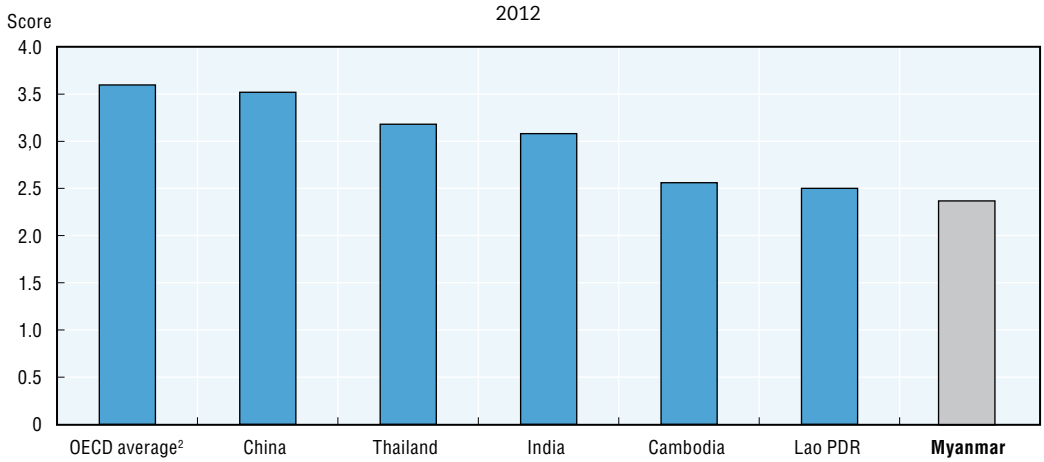
Laying the foundations for an enabling environment for private initiatives

The business sector could potentially become a driving force of Myanmar's economic development, provided the right institutional framework conducive to entrepreneurship and private initiatives is put in place. While foreign direct investment is needed to acquire technology, domestic private initiatives are equally important in paving the way of industrialisation. Business produces and supplies value-added through goods and services to society while developing technology, creating jobs and generating incomes. Although Myanmar is rich in natural resources and has abundant low cost labour,[18] it has not successfully managed to realise its full potential as a result of its centrally-planned economy, bureaucratic mismanagement and the economic sanctions imposed by a number of developed countries (UNESCAP, 1996; ADB, 2012b).

Business surveys conducted in Myanmar so far (Kudo, 2002 and 2005; JETRO, 2009 and 2012; Oo, 2013) have identified significant impediments to business, including common problems with: access to capital and credit; poor trade facilitation and high customs related fees; cumbersome business and trade licensing and permits; shortages of electricity; and weak telecommunications and inefficient transportations systems. Other identified challenges include a shortage of spare parts and raw materials, a low level of advanced technology utilisation, machinery and equipment deficiencies, and shortages of foreign currency. According to the World Bank's Logistic Performance Index (2012), Myanmar ranked 129 out of 155 countries in the world in terms of logistical efficiency (Figure 2.11). Similarly, Transparency International (2012) ranks Myanmar near the bottom of the Corruption Perceptions Index at 172 out of 176 countries, and the last among the ASEAN countries.[19]

The infant stage of the business sector and the large number of impediments to its development can, at least to some extent, be explained by Myanmar's past economic systems. Since its independence from the United Kingdom in 1948, Myanmar has followed a socialist economic model. In 1962, the government nationalised major businesses throughout the country and expropriated agricultural land. Markets were dismantled and many commodity and product prices were fixed by the government, which extended direct control over the allocation and distribution of commodities and products (UNESCAP, 1996). However, a reversal transpired beginning in 1987. The government worked to re-open markets and expand the role of private businesses while reducing the degree of state interventions, to promote integration into regional and global economies and to attract FDI (UNESCAP, 1996). Since the middle of the 1990s, the government has also adopted corporatisation and privatisation strategies for the reform of state-owned enterprises (Than, 2007). During this period, a number of business laws were introduced to encourage reform, notably the FDI Law (1988), the State-owned Economic Enterprises Law (1989), the Private Industrial Enterprise Law (1990), the Promotion of Cottage Industries Law (1991), the Cooperative Society Law (1992), the Hotels and Tourism Law (1993) and the Myanmar Citizens Investment Law (1994). In contrast to these wide-ranging efforts, the Myanmar Companies Act (1914) and associated rules (1940) and regulations (1957) remained in their original forms, providing the basic legal and regulatory framework for business.

Figure 2.11. **Logistics performance lags behind peers**[1]



Notes: 1. This index is based on six criteria, namely customs clearance process (i.e. speed, simplicity and predictability of formalities); trade and transport related infrastructure (e.g. ports, railroads, roads and information technology); international shipment cost; logistics services (e.g. transport operators and customs brokers); tracking and tracing; and timeliness. 2. No data for Israel.

Source: World Bank (2012), *Logistics Performance Index: Connecting to Compete 2012*, http://lpisurvey.worldbank.org/domestic/performance, (accessed 27 April 2013).

StatLink *http://dx.doi.org/10.1787/888932857539*

The business sector is dominated by small and informal enterprises

Comprehensive and consistent data describing private firms are not readily available in Myanmar. Although the Ministry of National Planning and Economic Development has served as the focal point office for business investments and enterprise registration throughout the country, its statistics are limited mainly to enterprises registered under the Myanmar Companies Act (1914) and the Myanmar Citizens Investment Law (1994). The Ministry also maintains information regarding foreign enterprises which are registered under the Foreign Direct Investment Laws (1988; 2012) (DICA, 2013a).

Data released by the Office of the President in January 2013 show that Myanmar has approximately 127 000 registered enterprises, and 99.4% of them are small and medium-sized enterprises (SMEs) (Table 2.1). The share of SMEs as a percentage of all businesses is in line with international baselines (UNESCAP, 2012a), although the working definition of SMEs provided by the government remains ambiguous (note that Myanmar has yet to formally define SMEs on a sector-wide basis).[20] The President's Office estimates that over 620 000 business entities, constituting over 83% of all Myanmar businesses, are in the informal sector; the majority of these are family-based establishments and self-employed workers (Nay Pyi Taw News, 2013).

Table 2.1. **Most businesses are small or informal**

	Number	Percentage
Formal sector		
Large enterprises	721	0.6%
Small and medium enterprises	126 237	99.4%
Total	126 958	100.0%
Informal sector	620 000	~ 83% of businesses

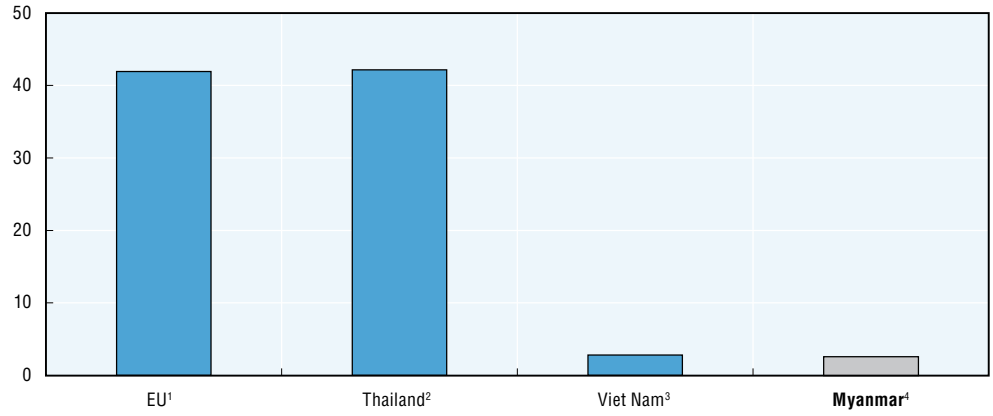
Source: Nay Pyi Taw News (2013), U Thein Sein delivers an address at Small and Medium Enterprises Development Central Committee meeting at Presidential Palace, 14 January 2013.

It is estimated that Myanmar has 2.6 SMEs per 1 000 people.[21] This number is far lower than that of EU countries or Thailand and slightly lower than that of Viet Nam (Figure 2.12). The comparatively small number of SMEs and the large size of the informal sector could be explained by a variety of reasons, including: *i)* a weak entrepreneurship culture; *ii)* a lack of incentives to enter the formal sector; *iii)* a remaining influence of the centrally planned economic system; and *iv)* the important role of state-owned enterprises in the market.

Further determination of the structure of Myanmar's business sector remains challenging because of a paucity of information. The majority of enterprises have not been captured by the data, in part because of the large number of micro or small-sized firms operating in the informal sector. While there is little reliable data available on employment in, or the output of, Myanmar's informal economy, it is a large and diverse sector, ranging in size from small family businesses to large enterprises. Informal work tends to be important in countries with high rates of poverty and institutional barriers in taxation, regulation, and the protection of property rights, all of which are significant challenges in Myanmar. Small informal businesses often have low levels of investment and productivity, while larger informal firms that avoid tax and regulation may result in a significant loss of potential government revenue and pose unfair competition to formal businesses. The transition of labour and other assets into formal work will therefore be an important part of Myanmar's development.

Figure 2.12. **SME density is low in Myanmar**

Number of SMEs per 1 000 people



Notes: 1. EU data not available for Greece and Malta. Data are for the year 2010. Employees <= 249 persons. Sectors include mining and quarrying; manufacturing; electricity, gas, stream and air conditioning supply; water supply, sewerage, waste management and remediation activities; construction; wholesale and retail trade, repair of motor vehicles and motorcycles; transportation and storage. 2. Thailand data are for the year 2010. Employees <= 200 persons. 3. Viet Nam data are for the year 2009. Employees < 300 persons. 4. Myanmar's totals are based on the data contained in Table 2.1.

Source: Authors' calculations based on Eurostat (2013), *Eurostat small and medium-sized enterprises (SMEs)* (database), European Commission, http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/special_sbs_topics/small_medium_sized_enterprises_SMEs, (accessed 13 May 2013); Office of Small and Medium Enterprises Promotion (2012), *Report on SMEs situation* (in Thai), Office of Small and Medium Enterprises Promotion, Thailand, www.sme.go.th/Pages/whitePaper/art_17.aspx; Ministry of Planning and Investment (2011), *White paper on small and medium sized enterprises in Viet Nam 2011*, Ministry of Planning and Investment, Viet Nam, www.economica.vn/Publications/tabid/113/topic/T18H16161015108716/Default; and Nay Pyi Taw News (2013), "U Thein Sein delivers an address at Small and Medium Enterprises Development Central Committee meeting at Presidential Palace", 14 January 2013.

StatLink *http://dx.doi.org/10.1787/888932857558*

Fundamentally, the problems of describing the state of the business sector in Myanmar come from the country's regulatory and policy frameworks, as well as its fragmented institutional structure. There are a number of parallel line ministries which regulate the business sector in Myanmar, but there is insufficient co-ordination between these entities.

Myanmar categorises business establishments into various types and segments. This classification system uses the following criteria: *i)* ownership and nationality (e.g. state-owned, owned by a citizen, foreigner-owned, or a joint venture); *ii)* industry and the respective ministries which handle business registration or licensing for that industry (e.g. hotels and tourism); *iii)* the laws and regulations governing various types of businesses (e.g. manufacturers under the Private Industrial Enterprise Law [1990]); and *iv)* the size of the business (e.g. the "cottage industry" under the Ministry of Cooperatives). The detailed structure of the business sector in Myanmar is shown in Table 2.2 using the best available data. Due to incomplete information, only 106 000 enterprises – less than the totals presented in Table 2.1 – are captured. Nevertheless, data available on Myanmar's businesses include: *i)* state-owned enterprises;[22] *ii)* Myanmar enterprises; *iii)* foreign enterprises; *iv)* partnerships; *v)* joint ventures; *vi)* business associations; *vii)* manufacturers, classified by size (i.e. large, medium and small); *viii)* micro-sized enterprises; *ix)* business co-operatives; and *x)* hotels and tourism business establishments, including tour guides.

Table 2.2. **The regulation of the business sector is fragmented**

Type of business organisation	Number of organisations	Percentage	Description	Registration office	Licensing office	Legal framework
State-owned enterprises	639	0.6%	Only those in the industrial sector; various industries from light manufacturing to heavy industry[1]	Various governmental offices including the Ministry of Industry and other ministries	Various governmental offices including the Ministry of Industry and other ministries	State-owned Economic Enterprises Law (1989)
Myanmar enterprises	30 135	28.5%	Wholly owned and controlled by Myanmar citizens; possibly overlapping with manufacturing enterprises.	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development and other related ministries; local municipal authorities	Myanmar Companies Act (1914) (and Companies Rules [1940]; Companies Regulations [1957]); Myanmar Citizens Investment Law (1994); Shops and Establishments Act (1951)
Foreign enterprises	1 686	1.6%	Wholly or partially owned or controlled by foreigners or braches of foreign enterprises; possibly overlapping with manufacturing enterprises.[2]	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development and other related ministries; local municipal authorities	Myanmar Companies Act (1914) (and Companies Rules [1940]; Companies Regulations [1957]); Foreign Investment Law (2012)
Partnerships[2]	1 072	1.0%	No more than 20 partners; registration is not compulsory.[2]	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development and other related ministries; local municipal authorities	Partnership Act (1932)
Joint ventures between state-owned enterprises and local enterprises	54	0.1%	Joint ventures with state-owned enterprises under the Special Company Act (1950) are exempted from obtaining a company registration; possibly overlapping with manufacturing enterprises.[2]	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development and other related ministries; local municipal authorities	Myanmar Companies Act (1914) (and Companies Rules [1940]; Companies Regulations [1957]); Special Company Act (1950); Myanmar Citizens Investment Law (1994)
Joint ventures between state-owned enterprises and foreign enterprises	17	0.0%	Joint ventures with state-owned enterprises under the Special Company Act (1950) are exempted from obtaining a company registration; possibly overlapping with manufacturing enterprises.[2]	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development and other related ministries; local municipal authorities	Myanmar Companies Act (1914) (and Companies Rules [1940]; Companies Regulations [1957]); Special Company Act (1950); Foreign Investment Law (2012)
Joint ventures between Myanmar enterprises and foreign enterprises	92	0.1%	Possibly overlapping with manufacturing enterprises.[2]	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development and other related ministries; local municipal authorities	Myanmar Companies Act (1914) (and Companies Rules [1940]; Companies Regulations [1957]); Foreign Investment Law (2012)
Business associations	57	0.1%	Private but non-profit organisations	Ministry of National Planning and Economic Development	Ministry of Commerce; local municipal authorities	Myanmar Companies Act (1914) (and Companies Rules [1940]; Companies Regulations [1957]); Law relating to Forming of Organizations – NGO Law (1988)

Table 2.2. **The regulation of the business sector is fragmented** *(cont.)*

Type of business organisation	Number of organisations	Percentage	Description	Registration office	Licensing office	Legal framework
Large sized manufacturing enterprises	4 808	4.6%	Automobiles, electrical equipment, consumer goods and others	Ministry of Industry	Ministry of Industry; local municipal authorities	Burma Companies Act (1914); Private Industrial Enterprise Law (1990); Special Company Act (1950); Workshop Law (1951)
Medium sized manufacturing enterprises	7 287	6.9%	Industrial tools and equipment, consumer goods, raw materials, publishing and others	Ministry of Industry	Ministry of Industry; local municipal authorities	Myanmar Companies Act (1914); Private Industrial Enterprise Law (1990); Special Company Act (1950); Workshop Law (1951)
Small sized manufacturing enterprises	31 137	29.5%	Food and beverages, construction materials, metals and minerals, garment and apparel, agricultural machinery and others	Ministry of Industry	Ministry of Industry; local municipal authorities	Myanmar Companies Act (1914); Private Industrial Enterprise Law (1990);[3] Special Company Act (1950); Workshop Law (1951)
Micro sized enterprises	13 309	12.6%	Small scale manufacturing and services in various industrial sectors, such as food and beverage, garment and apparel, construction materials, household goods, etc.	Ministry of Cooperatives	Ministry of Cooperatives; local municipal authorities	Promotion of Cottage Industries Law (1991); Law Amending the Promotion of Cottage Industries Law (2011)[4]
Cooperatives in the primary sector	5 985	5.7%	Agriculture, fishery, livestock and forest	Ministry of Cooperatives	Ministry of Cooperatives; local municipal authorities	Cooperative Society Law (1992)
Cooperatives in the industrial and service sectors	3 596	3.4%	Manufacturing, trading, wholesaling, retailing, transport, finance, healthcare, hotels	Ministry of Cooperatives	Ministry of Cooperatives; local municipal authorities	Cooperative Society Law (1992)
Hotels and tourism enterprises	5 790	5.5%	Hotels, travel agents, transport providers, tour guides	Ministry of National Planning and Economic Development and Ministry of Hotels and Tourism	Ministry of Hotels and Tourism; local municipal authorities	Myanmar Companies Act (1914); Hotels and Tourism Law (1993)
Total[5]	105 664	100.0%				

Notes: 1. In addition, there are a number of state-owned enterprises in non-manufacturing sectors, such as agriculture, mines, energy, transport, trading, construction and post and telecommunications; 2. Those enterprises registered under the Myanmar Companies Act (1914) at the Ministry of National Planning and Economic Development have to register as exporters and/or importers at the Ministry of Commerce in order to conduct international trade. Non-manufacturing foreign companies are not allowed to directly get involved in international trade (see Control of Imports and Exports (Temporary) Act (1947); Export Import Law (2012)). In 2011, 1 221 enterprises registered for international trade; 3. The objectives of this law are public-supervision driven, with perhaps the exception of tax exemptions and reliefs, as it aims to facilitate manufacturers' access to necessary industrial inputs such as land, utilities and finance as well as raw materials and technologies, which are primarily private enterprises' responsibility in a market economy; 4. These two laws relating to micro-sized enterprises aim to provide government support for capacity building, particularly in technical areas, and access to finance, including tax break as well as access to state-owned enterprises and foreign markets; 5. Total number of enterprises in this table is significantly lower than information provided by the President's Office, which indicates that there are 126 958 private enterprises in Myanmar in January 2013 while nearly 620 000 enterprises are still unregistered (Nay Pyi Taw News, 2013).

Source: CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar; DICA (Directorate of Investment and Company Administration) (2013a), *Data on Foreign Investment, Local Investment and Company Registration*, Directorate of Investment and Company Administration, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar, www.mnped.gov.mm; Central Department of SMEs Development Centre (2013), a presentation made by the Ministry of Industry on 16 January 2013; Small Scale Industries Department (2012), "Business opportunities in Myanmar", a presentation of the Ministry of Cooperatives, 17 December 2012.

State-owned enterprises remain important although less so than in the past

State-owned enterprises (SOEs) have played an important role in the economy of Myanmar for several decades. Military enterprises, operating across various sectors, are important in Myanmar (Box 2.9). Despite the implementation of market-driven reform measures since the end of the 1980s, SOEs still dominate many business fields like agribusiness, forestry, mines, energy, light and heavy industries, construction and telecommunications (Than, 2007). Although their share has been gradually and steadily declining since the early 1990s, SOEs accounted for 8.7% of GDP on average from 2004 to 2010, more than half of government revenues and over 40% of exports (Table 2.3). The IMF (2012b) estimates that the export of natural gas has accounted for more than 50% of public sector exports.[23]

While the private sector can presently enter into a number of industries without restriction,[24] SOEs still operate in major contributors to GDP, often competing with private enterprises. SOEs often enjoy preferential access to financing, which may limit opportunities for private investment. Although SOEs typically enjoy lower cost structures and better public services than those of private enterprises (e.g. preferential land allocation, discounted utility prices, a stable electricity supply, soft loans from state development banks and quick licensing, the majority of SOEs are not profitable [Table 2.3]; which also includes state-owned banks and financial institutions). This deficit structure strongly suggests that many SOEs require reform, perhaps including restructuring, as well as management changes, capacity building, and the adoption of corporatisation strategies.

The present government has taken seriously the need for SOE reforms (including corporatisation and in some cases privatisation). For example, the Ministry of Industry has reduced the number of industrial SOEs under its supervision from 142 to 49 in 2012, and plans to cut the number further to four strategically vital companies by 2014.[25] In addition to subcontracting, the government has encouraged private business to establish close connections with SOEs through joint ventures and partnerships for which the Special Company Act (1950) and the Partnership Act (1932) provide the legal structure. Such joint ventures and partnerships can provide access to markets and to finance for private business, while SOEs can acquire advanced management skills and technologies from private businesses.

It is important to ensure that the presence of state-owned enterprises in the marketplace does not thwart private entrepreneurs, skew competition or lead to other inefficiencies which ultimately limit growth and development. The challenge is to achieve "competitive neutrality" so that state-owned and private businesses compete on a level playing field. This calls on the government to address issues such as: choosing the best corporate form for SOEs, achieving a commercial rate of return, accounting for public service obligations, improving debt neutrality, and making public procurement open and transparent (OECD, 2012b).

It is easier to pursue neutrality if competitive activities are carried out by an independent entity, operated at arm's length from general government and shielded from ad hoc political interventions. SOEs should not be subject to undue competitive advantages or disadvantages. For example, government businesses should bear a similar tax burden as their private sector competitors, operate in the same regulatory environment, and be expected to pay the same interest rate on the debt obligations they incur as a private enterprise in similar circumstances. Public procurement practices should also be competitive and nondiscriminatory.

Box 2.9. **Military enterprises operate across various sectors**

In addition to state-owned enterprises, Myanmar enterprises, foreign enterprises, partnerships, joint ventures and co-operatives, there is another significant type of business in Myanmar: military enterprises (Araki, 2012). Military enterprises originated in the civil war during the 1950s. Under the control of the Ministry of Defence and the military leadership, they supplied necessary goods and services primarily for military operations. Contemporary examples of these companies include the Union of Myanmar Economic Holdings Ltd. (UMEH) and the Myanmar Economic Corporation (MEC).

UMEH is a corporatised, market-oriented military enterprise established during the market reforms of the 1990s. It was designed to encompass the governance practices of corporatisation. Today, the UMEH is the biggest conglomerate in Myanmar, with registered capital of USD 1.4 billion at present exchange rates. UMEH manages a diverse business portfolio, including: gems and teak; rubber products; fisheries; food and beverages; garments and apparel; construction; industrial materials such as steel, paints and cement; and electronic equipment. It also operates in the services sector, including trade, banking, hotels, retailing, transportation, real estate and telecommunications. It has funded a number of joint ventures with local investors and established nearly 50 ventures with foreign partners from Asian countries (such as Indonesia, Republic of Korea and Singapore).

MEC was established in 1997 and has also been involved in a wide range of business activities, including: gems and mineral extraction and exploration; the wood industry; steel production; construction; trading companies; agricultural produce; hotels and tourism; extraction and sale of petroleum and natural gas; and telecommunications.

Statistics on military enterprises are not available from national figures, which are compiled by the Central Statistical Organization of the Ministry of National Planning and Economic Development. Nor are they available in any other documents open to the public. Thus, there is no transparency with respect to military enterprises. Moreover, it would seem that no economic ministries supervise the joint ventures between military enterprises and domestic or foreign businesses. Under the Partnership Act (1932) and the Special Company Act (1950), such partnerships or joint ventures are exempt from line ministry registration. However, the Internal Revenue Department of the Ministry of Finance and Revenue has started collecting income taxes from military enterprises since January 2013; thus, more information on military enterprises is expected to be available to the public in the future.

Table 2.3. **State-owned enterprises are declining in importance**

(Kyats in millions)

	1990-91	1995-96	2000-01	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Average between 2004-10
Revenue	32 042	88 183	284 396	677 938	1 120 886	1 675 585	2 268 592	2 483 607	2 544 762	1 795 228
Expenditure	3 636	101 854	412 711	926 443	1 346 100	2 008 645	2 702 130	2 988 346	3 082 022	2 175 614
Deficit	-4 320	-13 671	-128 315	-248 506	-225 214	-333 060	-433 538	-504 739	-537 259	-380 386
Contribution to GDP	21.1%	14.6%	11.1%	7.5%	9.1%	9.9%	9.7%	8.5%	7.5%	8.7%
Contribution to government revenue	65.7%	68.6%	67.9%	53.5%	57.6%	56.4%	56.6%	53.6%	54.0%	55.3%
Share of public export	n.a.	n.a.	n.a.	43.3%	45.1%	39.6%	36.9%	36.5%	42.5%	40.7%

Note: State-owned enterprises include state banks and other state financial institutions.

Sources: Authors' calculations based on CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar; IMF (2012b), *Myanmar 2011 Article IV Consultation*, International Monetary Fund, www.imf.org/external/pubs/ft/scr/2012/cr12104.pdf; and Interconsulting (2013), *Myanmar Business Opportunities*, www.interconsulting.com.sg/myanmar-business-opportunities.htm.

Establishment of a robust legal and regulatory framework for business is an urgent priority

The legal and regulatory framework and institutional structure of business in Myanmar is fragmented. There is no effective centralised administrative system which includes registration or licensing for all business establishments, although the Ministry of National Planning and Economic Development formally has a central business registry. The Ministry has been designated to be a focal-point office for enterprise registration and administration, but it has not yet been able to capture the statistics of the entire business community.[26] A number of line ministries are involved in registration and licensing of individual businesses, as well as supervision of some business industries. For example, the Ministry of Industry supervises private manufacturing enterprises throughout the country, while exerting direct control over a number of state-owned manufacturing enterprises. The Ministry of Commerce provides licenses to exporters and importers[27] who register through the Ministry of National Planning and Economic Development.[28] A number of entities under the supervision of the Ministry of Cooperatives operate in various business fields (e.g. agriculture, food and beverages, light manufacturing and trading), while the Ministry of Hotels and Tourism regulates hotel and tourism businesses (CSO, 2013). It is expected that other economic ministries have their own business registrations and licensing schemes, and would therefore maintain statistics on the enterprises falling under their purview, but this information is not at present available for analysis.

As a consequence of this fragmented institutional framework, a variety of government-wide committees have been established for purposes of co-ordination on issues spanning industries and sectors (e.g. SMEs, industrial development, special economic zones, etc.). Another notable issue is that a partnership or a joint venture that is developed between a state-owned enterprise and either a domestic or foreign investor does not need to submit documents for company registration, potentially leading to less transparent management and finance in businesses that are established partially by the public.

Neither is there a common definition of enterprises among line ministries in Myanmar. The Myanmar Companies Act (1914), which was imported by the British authority from India to colonial Burma, and its related rules (1940) and regulations (1957), have no clear definition of enterprise, industries, and enterprise sizes. The Private Industrial Enterprise Law (1990) provides some definitions, such as for small, medium-sized and large enterprises, but its scope is limited to the manufacturing sector. On the other hand, the Promotion of Cottage Industries Law (1991) and the Law Amending the Promotion of Cottage Industries Law (2011) provides a definition of micro enterprises applicable to any sector and covers agribusiness, manufacturing and service sectors. In contrast, the Cooperative Society Law (1992) defines co-operatives across industries and sectors, including agriculture, manufacturing and services (inclusive of business financing and microfinance). The Hotels and Tourism Law (1993) regulates the business in the tourism sector.

There are three important features of the contemporary legal and regulatory framework for business in Myanmar. First, SOEs (including military enterprises) and their joint venture business partners are afforded a great degree of freedom and

economic privilege. This can lead to less transparency in their operations. Second, joint ventures and partnerships between SOEs and private enterprises, including those financed through foreign investments, are not required to register as enterprises unless they otherwise apply for the incentives under the Foreign Investment Law (2012) or the Myanmar Citizens Investment Law (1994). Third, no legal and regulatory framework that is inclusive of the service sector as a whole has been developed. Rather, piecemeal rules exist for specific industries like banking, telecommunications and the hotels and tourism sector. Thus, there is no clear policy or measure for the development of various industries within the services sector, many of which are dominated by the public sector. The government must provide a level playing field for business competition, which is a prerequisite for inclusive and sustainable development in Myanmar. The current legal and regulatory framework has a large number of deficiencies that need to be fixed in order to turn the business sector into a driver of development (Table 2.4).

The government's private sector development agenda is focusing on fostering manufacturers …

Nearly three-quarters of private manufacturing enterprises are small (Table 2.5). The manufacturing sector contains a number of large enterprises, altogether 4 808 manufacturers, representing 11.1% of all manufacturing firms. The food and beverage industry dominates manufacturing in terms of the number of firms. High value-added and capital intensive industries, such as automobiles and electrical equipment, tend to have more large enterprises, while smaller businesses focus more on labour intensive industries, such as food and beverages and apparel and garment. The thresholds for manufacturing enterprises (i.e. micro, small, medium and large) differ from those in neighbouring countries (Annex Table A.2.2). According to the Ministry of Industry, roughly five million people are currently employed in the manufacturing sector, which suggests that manufacturing constitutes a relatively large sector for employment (approximately 16% of the entire workforce, or 30 million people), although there is not yet any sort of target for industrial employment. The Ministry has drafted a new SME law in collaboration with the Union of Myanmar Federation for Chambers of Commerce and Industry (UMFCCI) with technical assistance from the international aid community. This SME law aims to foster SMEs through enhancing access to markets and finance, as well as training and networking.

Private manufacturing firms are currently supervised by the Ministry of Industry under the Private Industrial Enterprise Law (1990). This law aims to provide a clear legal and regulatory framework to foster private manufacturers. It also facilitates private manufacturers' access to necessary industrial inputs such as land, utilities and finance as well as raw materials and technologies and to tax exemptions and reliefs. Under this framework, the Ministry of Industry has developed 18 industrial estates and is currently working on seven new estates, including those in the border regions, which are under direct supervision of the Industrial Zone Supervision Committees (Central Department of SME Development Centre, 2013). In addition, three large special economic zones (SEZs), namely Dawei SEZ, Kyaukphyu SEZ and Thilawa SEZ, are being developed in collaboration with bilateral donors and the business community. These aim to attract export-driven FDI mainly from heavy and high-tech manufacturers.

Table 2.4. **Improvements needed in the legal and regulatory framework for business**

Subcomponent	Content and function	Related law and regulation in Myanmar	Issues in the legal and regulatory framework of Myanmar
Business registration	Three core functions are: a) overseeing business incorporation and regulating enterprise names to ensure uniqueness; b) maintenance of a commercial registry; and c) registration with the tax authorities.	Myanmar Companies Law (1914); Companies Rules (1940); Companies Regulations (1957); Shops and Establishments Act (1951); Workshops Law (1951)	Weak and lack of incentives
Licensing	Business licensing with line ministries is a potential bottleneck in starting a business.	Some sector based laws (i.e. Hotels and Tourism Law (1993))	Needs centralisation and simplification (e.g. one-stop business service centre)
Labour regulation	A good set of labour regulations should include employment, industrial relations, social securities laws and regulations of labour markets to protect workers.	Employment and Training Act (1950); Employment Restriction Act (1959); Employment Statistics Act (1948); Factories Act (1951); Labour Union Law (2011); Leave and Holidays Act (1951); Minimum Wages Act (1949); Oilfields Labour and Welfare Act (1951); Payment of Wages Act (1936); Social Security Act (1954); Shops and Establishments Act (1951); Trade Disputes Act (1929) and Workmen's Compensation Act (1923)	Adequate but requires the review of the consistency and effectiveness of detailed rules and regulations as well as their enforcement
Property registration	Clearly-defined property registration system reduces transaction costs and improves the security of property rights which benefits all businesses by improving their access to financing through the private banking sector.	Transfer of Immovable Property Restriction Law (1987)	Very weak (also prohibited for foreign enterprises)
Credit regulation	The government has to protect creditors and facilitate lending by establishing regulations for loss recovery.	Myanmar Companies Law (1914); Companies Rules (1940); Companies Regulations (1957)	Needs improvement
Corporate governance	A set of policies about how an enterprise is directed or administered and a corporate governance code to enhance accountability and transparency are essential tools for enhancing good corporate governance practices. This ensures ethical behaviour of businesses and, ultimately, prevents corruption.	Myanmar Companies Law (1914); Companies Rules (1940); Companies Regulations (1957); Shops and Establishments Act (1951); Workshops Act (1951)	Weak
Taxation	Complicated tax administration and inconsistent tax schedules give rise to business operations in the informal sector. Tax compliance costs are often regressive and put a disproportionate burden on small enterprises.	Income Tax Law (1974); Commercial Tax Law (1990); Myanmar Stamp Act (1899); Court Fees Act (1870); Myanmar Citizens Investment Law (1994); FDI Law (2012); Private Industrial Enterprise Law (1990); Promotion of Cottage Industries Law (1991); Law Amending the Promotion of Cottage Industries Law (2011); SEZ Law (2011); Dawei SEZ Law (2011)	Reconciliation required among different tax incentives by various investment and development laws (i.e. inconsistent tax incentives between Income Tax Law (1974) and SEZ Law as well as FDI Law (2012) and Myanmar Citizen Investment Law (1994)); establishment of Tax Bureau under the Ministry of Finance and Revenue
Trade facilitation	Trade facilitation is critical for Myanmar's participation in regional and global markets. Such integration could be achieved by simplifying documentary requirements and customs procedures, including inspection modalities.	Customs Tariff of Myanmar (2007); SEZ Law (2011); Dawei SEZ Law (2011); and other related laws	Work needed in customs and duty collection procedures

Table 2.4. **Improvements needed in the legal and regulatory framework for business** *(cont.)*

Subcomponent	Content and function	Related law and regulation in Myanmar	Issues in the legal and regulatory framework of Myanmar
Contract enforcement	Contract enforcement measures include simplified procedures of commercial dispute settlements and the establishments of a transparent case management system and a judicial information system.	Myanmar Companies Law (1914); Companies Rules (1940); Companies Regulations (1957); Shops and Establishments Act (1951); Workshops Law (1951)	Weak
Alternative dispute resolution	An effective mediation or arbitration system makes it easier to settle commercial disputes, saving time and money. While it should not be taken as a substitute to the formal judicial system, introducing mediation is one way of making the system more efficient for SMEs, which typically lack resources and knowledge.	Trade Disputes Act (1929); Arbitration Act (1944); Myanmar Companies Law (1914) and Companies Rules (1940); Companies Regulations (1957); Shops and Establishments Act (1951); Workshops Law (1951); Export/Import Rules and Regulations; Myanmar Citizens Investment Law (1994); FDI Law (2012); Private Industrial Enterprise Law (1990); Promotion of Cottage Industries Law (1991) and Law Amending the Promotion of Cottage Industries Law (2011); SEZ Law (2011); and Dawei SEZ Law (2011)	Non-existent in Myanmar.
Bankruptcy law or exit rules	The existence of clear and enforceable bankruptcy laws or exit rules plays an important role in ensuring fair and efficient dissolution of enterprises with full transparency. This reduces the risk for entrepreneurial activities. The system must provide a pre-determined set of procedures specifying the legal definition of insolvency.	Myanmar Companies Law (1914) and Companies Rules (1940); Companies Regulations (1957); Shops and Establishments Act (1951); Workshops Law (1951)	Practically non-existent in Myanmar although the subsection of the Myanmar Companies Act (1914) partially covers the provision of bankruptcy.
Competition policy	Competition laws foster a culture of fair competition that ultimately benefits society through better quality, price and service. Competition laws should provide a regulatory framework in order to maintain and improve efficiency in markets as well as monitor pricing practices to restrain unreasonable price rises.	None	Non-existent; anti-monopoly law and a responsible a public office are required.
Anti-corruption	Proper law and regulatory framework can reduce abuses of discretionary power by enhancing transparency and minimizing uncertainty while maximizing business' compliance with rules.	None	Need legal and regulatory framework.

Source: Authors' compilation based on UNESCAP (2012a), *Policy Guidebook for SME Development in Asia and the Pacific*, United Nations Economic and Social Council for Asia and the Pacific, Bangkok, www.unescap.org/tid/publication/indpub2621.pdf and PWC (2012), *Myanmar Business Guide*, August 2012, PricewaterhouseCoopers LLP, Singapore, www.pwc.com/sg/en/assets/document/myanmar_business_guide.pdf.

Table 2.5. **Most manufacturing firms operate in the food and beverages sub-sector**

Sector	Large	Medium	Small	Total	Percentage
Food and beverages	2 369	4 110	20 976	27 455	63.5%
Construction materials	510	650	2 117	3 277	7.6%
Clothing and wearing apparel	341	380	1 001	1 722	4.0%
Metal and mineral	315	381	1 204	1 900	4.4%
Personal goods	375	410	330	1 115	2.6%
Industrial raw materials	169	240	282	691	1.6%
Printing and publishing	60	117	183	360	0.8%
Household products	144	79	97	320	0.7%
Transport vehicles	194	40	33	267	0.6%
Industrial tools and equipment	15	49	66	130	0.3%
Agricultural machinery	9	25	37	71	0.2%
Electrical equipment	43	15	12	70	0.2%
Others	264	791	4 799	5 854	13.5%
Total	4 808	7 287	31 137	43 232	100.0%
Percentage	11.1%	16.9%	72.0%	100.0%	

Source: Central Department of SMEs Development Centre (2013), a presentation made by the Ministry of Industry on 16 January 2013.

...commercialising agriculture...

A substantial increase in commercial agricultural production would require improvements in farms' productivity, in their connections to markets, in agricultural workers' access to quality land and land rights and more freedom in crop selection. Land yields and labour productivity in Myanmar's agriculture are low, keeping incomes low and poverty high in rural areas. Public and private investment in the sector has been insufficient, limiting know-how, input use, and capital investments in cultivation and post-harvest technologies. While the use of pesticides has increased significantly in recent years, fertiliser use has fallen dramatically, primarily due to a decline in its use in rice cultivation. The estimated need for inputs still exceeds their use, as high prices prevent farmers from buying inputs that will increase their yields (FAO and WFP, 2009).

While farmers are responsible for their own input use, the public sector has a supportive role to play in ensuring these inputs are available and used effectively. Most government spending on agriculture goes toward irrigation projects, limiting the resources available for seed, research, and extension programs. Such investments provide public goods not fully replaceable by the private sector, support improved yields, and could raise government revenues (Dapice et al., 2010).

Fixed capital investments have been improving gradually. Though the use of tractors and power tillers remains low in comparison with neighbouring countries, their use is expanding. Irrigation systems have grown by 26.5% over 1999-2000 to 2009-10 to cover 5 755 acres, or 11.4% of the total harvested area (CSO and Department of Agricultural Planning, 2011). While the government-constructed systems account for 28.5% of total coverage and are contributing to this expansion, many do not function reliably. There is similarly little use of effective post-harvest technologies, which prevent losses and preserve crop quality after harvesting. As investment is low and access to electricity often unavailable, rice drying is often not mechanised and milling tends to be done with unsuitable and outdated machinery (Dapice et al., 2010). Investments in food preservation and processing technologies should lead to improvements in output quantities and in quality, ensuring better prices.

The difficulty in accessing agricultural credit to finance working and fixed capital is one of the most important barriers preventing farmers from making these investments. Access to credit on acceptable terms is constrained for many in Myanmar, and financial services are particularly underdeveloped in rural areas. Poorly-defined land rights have also limited farmers' abilities to use their properties to secure financing.

Farmers are also discouraged from investing in productivity improvements by broader inefficiencies that limit their potential to expand and sell their output. Commercial agriculture requires reliable connections to markets. These links are underdeveloped in rural Myanmar as a result of insufficient infrastructure and inefficient distribution systems. Myanmar has fewer roads for its area, a smaller share of its roads paved, and fewer vehicles per person than the average among developing countries in the region (World Bank, 2013a). These barriers raise costs and can increase post-harvest losses, reducing the prices farmers can expect to receive for their output.

The equitable development and modernisation of agriculture in Myanmar is further constrained by inefficient and unsustainable patterns of land use. Specifically, regulations on land use, ambiguities in ownership, unequal access to land, and shifting cultivation prevent productive investments. Reforms in a number of these areas are helping to address these concerns, though challenges remain. All land in Myanmar is ultimately owned by the government, though farmers with lease rights are able to use, rent, and borrow against their holdings. They are, however, required to grow particular crops or apply for permission to change their crops, as the result of a longstanding government goal of ensuring self-sufficiency in rice production. This regulation makes it difficult for farmers to choose crops that are well-suited to their land and which would earn the greatest return.

State ownership of land and the underdeveloped rule of law have also left land rights unclear in many cases. This has reduced incentives for investing in improving farmland and has created difficulties for farmers interested in borrowing against the land they work. The Farmland Law, passed in 2012, attempts to address these challenges by creating official land use certificates clarifying famers' land rights. Disputes over ownership are still settled outside of the courts, through committees that may provide a less transparent and rules-based process. A related problem is that of landlessness among rural households. The Administration of Vacant, Fallow and Virgin Lands Law of 2012 established the legal framework for distributing unused lands among the landless, though it will remain to be seen how effective it is in practice. These reforms do not address unsustainable farming practices, such as shifting cultivation.

… and nurturing service industries

Service industries can potentially employ a large number of people and are in general less energy-intensive than other industries. However they presently make up a small part of the economy, contributing about 16% of GDP.

The tourism sector has been one of the key industries of Myanmar, attracting substantial amounts of foreign and domestic investments. Recently, the sector has experienced rapid growth. From 2009 to 2012, the number of tourists to Myanmar more than doubled, reaching 560 000 in 2012. During the same period, tourism earnings and spending per tourist increased by 57.5% and 20.4%, respectively, on a yearly average basis (Table 2.6). In 2012, tourism earnings reached over USD 500 million, while the mean expenditure per tourist per day was USD 135. Nearly two-thirds of tourists come from Asian countries, such as China, Thailand, Japan and the Republic of Korea. Owing to the privatisation efforts that commenced in the early 1990s, the tourism sector in Myanmar has been driven by private enterprises. In the past two decades, the number of state-owned hotels declined to nine in 2011 from its high of 39 in 1991, while private hotels, which did not exist (at least formally) in 1991, numbered 705 as of 2011 (CSO, 2013). Although the hotel business has attracted a large amount of foreign direct investment, mainly from the neighbouring Asian countries (Table 2.7), Myanmar enterprises continue to dominate tour operations and transport services, benefiting from the protection of favourable foreign investment laws (1988 and 2012).

Table 2.6. **Tourism is expanding rapidly**

	2009	2010	2011	2012	Average yearly growth rate 2009-12
Number of tourists	243 278	310 688	391 176	593 381	35%
Earnings (USD)	196 million	254 million	319 million	534 million	41%
Average expenditure per tourist per day (USD)	USD 95	USD 102	USD 120	USD 135	13%
Average length of stay (days)	8.5	8	8	7	

Source: Ministry of Hotels and Tourism (2012), *Myanmar Tourism Statistics 2012*, http://myanmartourism.org/tourismstatistics.htm.

Under the present reform process and relaxed international sanctions, it would seem that the growth in the tourism industry is poised to continue. In particular, more tourists from Western countries are expected. This bodes well for attracting and encouraging more foreign and domestic investments. The upgrading and expansion of tourism infrastructure and services, such as accommodation and transportation, as well as the on-going reform of visa applications, will enhance the attractiveness of Myanmar as a tourist destination.

Table 2.7. **Most investors in hotels are from the region**
Stock of investment in hotels and commerical complexes, 2012

Country	Investment (USD million)
Singapore	598
Viet Nam	300
Thailand	236
Japan	183

Source: Ministry of Hotels and Tourism (2012), *Myanmar Tourism Statistics 2012*, http://myanmartourism.org/tourismstatistics.htm.

Transportation is another example of a service industry with bright prospects. Road transport handled more than two-thirds of domestic cargo, while water transport dominated international cargo. Road transport tends to be used for short distances, whereas rail and water transport are used for long distances (Table 2.8). The road transportation industry in Myanmar can be characterised as lacking economies of scale, and suffers from low technology and a lack of support from the government. In 2010, there were 546 trucking companies and 734 forwarders in Myanmar, all of which were Myanmar enterprises licensed by the Ministry of Rail Transport (JIFFA, 2012). Almost all of the transport companies are categorised as small enterprises by the government. They focus on specialised route services, and none provides services nationwide (UNESCAP, 2012b). Many of these small operators are organised into so-called "gates" (GMS-BF, 2012). These gates exist in each major city and consolidate cargo for particular routes. They are characterised by fluctuating demands, high competition among small players, low freight rates and operating margins and inadequate investment.

Table 2.8. **Road transport is the major transport mode**
Cargo in thousands of tons, 2010

	Domestic	Share	International	Share
Road	20 560	72%	1 076	5%
Rail	3 322	12%	n.a.	n.a.
Air	1	0%	16	0%
Water	4 786	17%	22 220	95%
Total	28 669		23 312	

Source: JIFFA (2012), *ASEAN Logistics Survey Report, Volume 5: Myanmar*, March 2012, Japan International Freight Forwarders Association Inc., Tokyo, www.jiffa.or.jp/en/notice/entry-2141.html.

Transport companies normally use second-hand 22- or 12-wheel trucks, mainly imported from Japan. There are some new trucks from China that have gained popularity, particularly after the relaxation of import-licensing in 2011. There is also a large secondary fleet of 10- and 6-wheel trucks running on local distribution, low-volume routes and restricted-access roads (GMS-BF, 2012). These vehicles are often old and are no longer competitive on main routes.

In terms of costs, the largest expense associated with transportation remains diesel fuel. On average, diesel fuel in Myanmar is about 80% of total expenses. This is driven by the high energy demands of an aging fleet, a lack of consideration for the depreciation of trucks and bad road conditions. Apart from diesel costs, tire replacement and drivers fees contribute to the price of transportation significantly. Unofficial charges at checkpoints along the road constitute an additional (and illicit) cost of transporting material and goods.

Challenges facing land transport in Myanmar include: *i)* fluctuating demands and limited capacities; *ii)* a paucity of modern facilities and equipment; and *iii)* unreliable services. The lack of tracking services in particular has been viewed as a challenge by foreign investors.

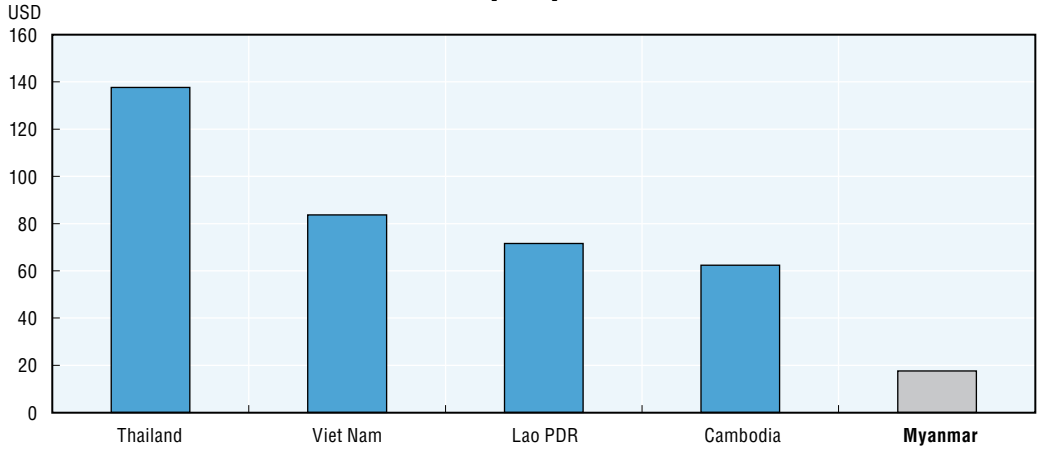
Facilitating investment requires legal and regulatory reforms to improve the business environment

In Myanmar, investments in businesses come mainly from three sources: foreign investors, domestic private investors, and the government through state-owned enterprises (including military enterprises). Several business laws regulate such investment activities, namely the Myanmar Companies Act (1914), the State-owned Economic Enterprise Law (1989), the two Foreign Investment Laws (1988 and 2012), the Myanmar Citizens Investment Law (1994), the Special Economic Zone Law (2011), and the Dawei Special Economic Zone Law (2011).

Myanmar has attracted foreign investors mainly from neighbouring countries primarily interested in Myanmar's natural resources and power sectors. However, FDI inflows into Myanmar are far less than those of its neighbouring countries in terms of per capita FDI value (Figure 2.13). The majority of FDI inflows into Myanmar, close to 80%, go to oil and gas (extraction) and the power (electrical generation) industries (Table 2.9). Twelve sectors benefit from FDI. The power sector leads, representing 46% of the total value. It is followed by the oil and gas industry, comprising 33.9% of the total investment; the mining and the manufacturing sectors stand in third and fourth place overall with 6.8% and 5% of total investment, respectively. Hotels and tourism and real estate also receive substantial shares of investment, with 3.3% and 2.5% respectively. The FDI inflows into other industries are relatively small in terms of their contribution to the total investment.

Figure 2.13. **Low FDI inflows in Myanmar, compared with its peers**

FDI inflow per capita, 2011



Source: UNCTAD (2013), *UNCTADSTAT* (database), United Nations Conference on Trade and Development, http://unctadstat.unctad.org/ and UNESCAP (2013), *UNESCAP Data Centre* (database), United Nations Economic and Social Council for Asia and the Pacific, www.unescap.org/stat/data/.

StatLink *http://dx.doi.org/10.1787/888932857577*

Table 2.9. **Most FDI flows into the primary sector**
FDI inflows to Myanmar by sector: Approved basis (as of 31 January 2013)

Sector	Approved amount (USD million)	Percentage
Power	19 238	46.0
Oil and gas	14 182	33.9
Mining	2 830	6.8
Manufacturing	2 089	5.0
Hotel and tourism	1 365	3.3
Real estate	1 056	2.5
Livestock and fisheries	330	0.8
Transport and communication	314	0.8
Industrial estate	193	0.5
Agriculture	183	0.4
Construction	38	0.1
Other services	25	0.1
Total	41 842	100.0

Source: DICA (2013b), Directorate of Investment and Company Administration, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar, www.dica.gov.mm (accessed March 2013).

The majority of FDI inflows to Myanmar come from neighbouring Asian countries and some EU countries. The national origins of FDI inflows to Myanmar reflect its trading relationships. China, inclusive of Hong Kong, China, significantly leads all other countries with USD 20.6 billion (Table 2.10). This represents nearly half of total foreign investments in Myanmar throughout the period. Thailand investors rank second with investments valued at approximately USD 9.6 billion. It is followed by Korea with USD 3 billion. The investment of China and Thailand mainly went to the power, natural gas and mining sectors. Among the top investor countries, four countries are from ASEAN, two are from EU, and three are from other parts of Asia.

Table 2.10. **Most FDI comes from neighbouring countries**
FDI inflows to Myanmar by country (as of 31 January 2013)

Country	Approved amount (USD million)	Percentage
China, including Hong Kong, China	20 559	49.1
Thailand	9 568	22.9
Korea	2 979	7.1
United Kingdom	2 799	6.7
Singapore	2 167	5.2
Malaysia	1 031	2.5
France	469	1.1
Viet Nam	362	0.9
India	274	0.7
Others	1 634	3.8

Source: DICA (2013b), Directorate of Investment and Company Administration, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar, www.dica.gov.mm (accessed March 2013).

In contrast to FDI sector destinations, domestic investments have been made mainly into construction, manufacturing and services (Table 2.11). State-owned enterprises make investments by themselves and through their joint ventures or local/foreign partnerships. Although detailed statistics are not fully available regarding the patterns of SOE investment, capital investment by sector is available from 2004 to 2011 (Table 2.12). While a number of SOEs are losing money (Table 2.3 and Annex Table A.2.3) – thus limiting their ability to reinvest from retained earnings – state-owned enterprises have made significant investments compared with those of domestic private actors. Yet, the low quality and reputation of their products and services (partially owing to a dearth of modern technology, modern production facilities and management systems) strongly suggest that the investments of state-owned enterprises are not adequate. This appraisal may even include areas where SOEs seem to be generating a profit, for example in mining, energy and power, finance and communications.

Table 2.11. **Most domestic investment is in construction and manufacturing**

Domestic investment by sector (as of 31 January 2013)

Sector	Approved amount (Kyat millions)	Percentage
Construction	646 033	27.0
Manufacturing	575 860	24.1
Transport	292 127	12.2
Industrial estate	249 213	10.4
Power	246 233	10.3
Real estate	67 582	2.8
Hotel and tourism	54 237	2.3
Livestock and fisheries	21 603	0.9
Mining	11 008	0.5
Agriculture	548	0.0
Others	229 274	9.6
Total	2 393 717	100.0

Source: DICA (2013b), Directorate of Investment and Company Administration, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar, www.dica.gov.mm (accessed March 2013).

Table 2.12. **SOE investment is focused on a narrow range of sectors**

Investment by state-owned enterprises 2004-11

Sector	2004-11	Percentage
Manufacturing	578 661	31.5
Transport	514 552	28.0
Energy	480 474	26.2
Information and communications	187 456	10.2
Agriculture, forest, livestock and fisheries	33 622	1.8
Banking, finance and insurance	19 115	1.0
Construction	12 233	0.7
Mining	5 131	0.3
Social services	3 904	0.2
Trade	1 093	0.1
Total	1 836 241	100.0

Source: CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar.

Myanmar has been encouraging business investments from both domestic and foreign sources since the earlier reform process at the end of the 1980s. A number of reform measures have been implemented, including six investment-related business laws: the State-owned Economic Enterprise Law (1989), the Foreign Investment Laws (1988; 2012), the Myanmar Citizens Investment Law (1994), as well as the Special Economic Zone Law (2011) and the Dawei Special Economic Zone Law (2011). The government, in partnership with the OECD and ASEAN, is also undertaking an Investment Policy Review in the framework of the ASEAN-OECD Investment Programme, with the aim of identifying priorities for further reform and ultimately making the country a more attractive destination for investors (OECD, 2013b).

It is anticipated that changes in investment regulation will also be enacted in the form of the Myanmar Companies Act (1914). These laws generally aim to facilitate the development of the private sector by encouraging business investments, providing incentives to businesses (e.g. tax breaks and land leasing) and by regulating business activities (e.g. ownership structure and line of business) within Myanmar (Annex Table A.2.4).

The Myanmar Companies Law (1914) serves as the central framework for companies of all types, with the exception of state-owned enterprises. Enterprises, including foreign-owned entities, can make investments through the mechanisms provided in this law to any business in any industry or sector unless otherwise prohibited, for example by specific provisions in industries such as utilities, mining, forestry, public transportation and defence-related activities. An advantage to investing under this law is that entrepreneurs can establish their enterprises with a smaller amount of capital than under other laws, although they cannot access the incentive schemes provided by other legal frameworks.

The State-owned Economic Enterprise Law (1989) delineates the boundary of private and public business activities. It lists prohibitions for private investment in certain sectors, while SOEs can operate in these areas without constraints. As a result, SOEs' activities have extended across a range of economic activities in Myanmar. The government has implemented corporatisation and privatisation strategies since the middle of the 1990s and the present government has tried to accelerate this process.

Myanmar's Foreign Investment Law (1988) attracted FDI from neighbouring countries, particularly in the primary sector (energy and mining), but has not been as successful as envisioned. The government has provided incentives (e.g. tax breaks and land leasing rights) and a simple list of desirable areas for foreign investment, while encouraging foreign investors to establish joint ventures or partnerships with state-owned enterprises where more capital, advanced technology and managerial skills are required. The new Foreign Investment Law (2012) extends the 1988 FDI Law with additional concessions to foreign investors (e.g. more generous tax breaks and land leasing rights). The new law defines investment broadly, including foreign portfolio investment, while no definition existed in the old law. In the absence of a stable investment climate in Myanmar, the new FDI law aims to send a positive message to the world that the country is open for business.

Compared to other foreign investment laws in ASEAN, Myanmar's old and new laws are neither overly generous nor excessively restrictive (UNESCAP, 2012c). One of the notable differences between the old and new FDI laws is that the new FDI law provides a long and detailed negative list to restrict and regulate the activities of foreign

investors in a number of fields. These restrictions apply to 237 business activities in total, although the new FDI law has paved the way for long-anticipated business opportunities for foreigners in areas such as trading, wholesaling, retailing, communications and real estate. It also allows many manufacturing activities only through joint ventures, suggesting the urgent need for capacity building in local manufacturing so that firms can be seen as reliable partners to foreign investors.

The objectives of the Myanmar Citizens Investment Law (1994) are twofold. First, it aims to provide a level playing field for both domestic investors and foreign investors. The old Foreign Investment Law (1988) provided a package of incentives which domestic investors were not able to access. However, following the introduction of better investment incentives in the new Foreign Investment Law (2012) for foreign investors, revisions to the Myanmar Citizens Investment Law (1994) is strongly recommended. Otherwise, there is a risk that a gap will open up again as regards the differential treatment of foreign and domestic capital. Second, the Myanmar Citizens Investment Law encourages domestic business to establish joint ventures or partnerships with state-owned enterprises. It is hoped that SOEs will use such partnerships to acquire market-driven business managerial skills in addition to benefitting from the opportunities for expansion from the infusion of foreign capital. A simple list of desirable areas for domestic investment (i.e. agriculture; livestock and fisheries; forestry; mining; manufacturing; and services) is proposed in line with that of the old Foreign Investment Law (1988). In this regard, the Ministry of National Planning and Economic Development has drafted a new Myanmar Citizens Investment Law in order to be in harmony with the new Foreign Investment Law (2012), and it is expected to be enacted in 2013.

Finally, the Special Economic Zone Law (2012) and the Dawei Special Economic Zone Law (2011) aim to provide the necessary policy support to the three large, developing special economic zones (SEZs) in Myanmar. These three zones are Dawei SEZ, Kyaukpyu SEZ and Thilawa SEZ. The SEZ laws are applicable regardless of the nationalities of companies and investors, and they apply to all industries. The laws include lists for desired business activities within SEZs, such as: port management; high tech industries; electricity generation and distribution; logistics and transport services; infrastructure construction; oil and natural gas distribution and pipeline construction; agribusiness; livestock and fisheries; forest products; limited trading; hotels and tourism; education and healthcare; and real estate. The SEZ laws also encourage investors to establish joint ventures or partnerships with SOEs. The SEZ laws provide more generous incentives to investors than the existing FDI and domestic investment laws (e.g. land leasing up to 75 years for large enterprises).

Despite improvements in the overall legal environment, a careful review reveals some remaining issues in business law. First, individual laws have their own tax incentive structures, which require not only co-ordination among them but also consultation with (and perhaps approval from) the Tax (or Revenue) Bureau, as such tax incentives will directly impact national revenue. For example, the present FDI law and SEZ laws allow investors to enjoy tax holidays up to five years, while the Income Tax Law (1974) prohibits such tax incentives that extend beyond three years. This issue may require the revision of incentive structures in investment-related business laws, ideally to develop only a general business law – perhaps similar to that of Singapore – that covers investment issues.

Second, individual investment-related business laws carry either a positive list or a negative list for desired or prohibited business activities, which may generate unnecessary confusion for the business community. It may also constitute a bureaucratic burden for

public administration. In most countries, there are many specific provisions restricting certain business activities based on industry and sector, in particular as regards mining, natural resources and public utilities.[29] Other sectors may be banned altogether from FDI (negative list) while various services industries, including banking, telecommunications and retailing also have their own (often rather restrictive) legal requirements for FDI. However, a number of different positive and negative lists for business in Myanmar may increase transaction costs for both the business and public sectors.

Third, investment-related laws do not carry special provisions for smaller players such as SMEs. Even the two SEZ laws would seem not to provide the same incentives to smaller businesses compared with their larger counterparts (e.g. tax breaks and land leasing rights). SMEs are a vital part of the business community in any country, typically accounting for more than 99% of business entities. They, particularly small and micro-sized enterprises, require special consideration from the government in order to reduce their transaction costs for making additional investment (UNESCAP, 2012a). The present investment laws in Myanmar lack such a strategy for business development.

Fourth, the SEZ laws (2011; 2012) are only two examples of investment-related business laws that apply different requirements and offer different incentives based on locations (zones) for private investment within the country. Taking into consideration the different characteristics and conditions of locations, the SEZ strategies may be expanded to other border or rural areas to develop the business sector there. This strategy may be particularly useful for the development of export processing zones along the border for labour-intensive export business.

Finally, Myanmar is a rare example of dual investment laws based on business ownership (i.e. domestic or foreign). The majority of neighbouring countries, such as Cambodia, Indonesia and Singapore, have no discrimination between foreign and local investors in their investment legislation, while others have maintained a less restrictive discrimination (e.g. Thailand and Viet Nam).[30]

External finance sources for business have been limited

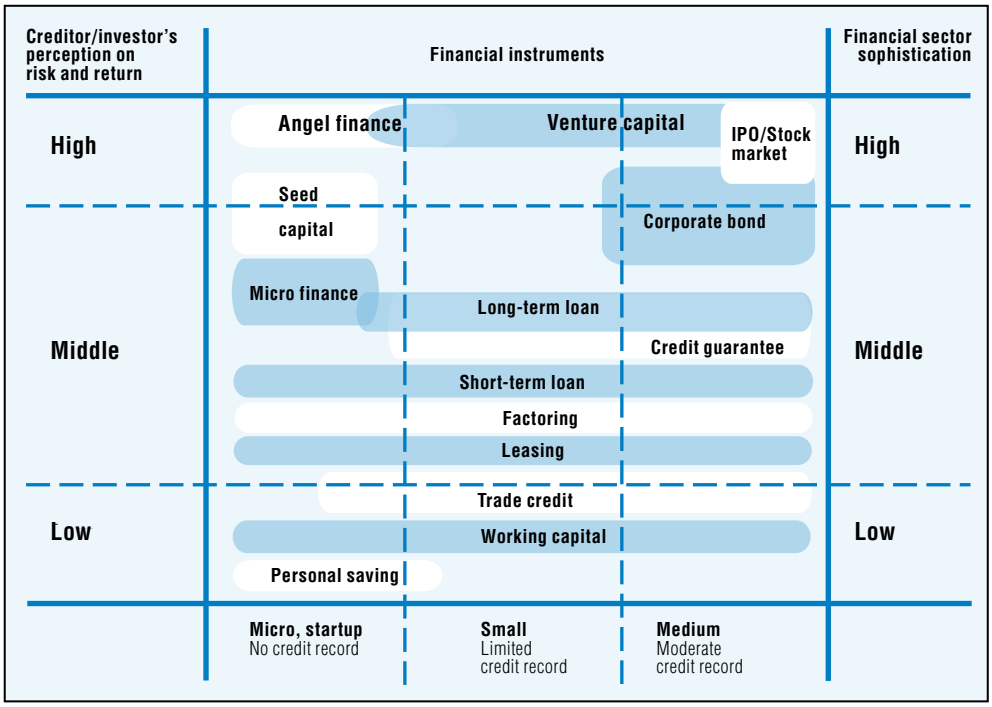
Myanmar's business finance is simple and characterised by the use of enterprises' own cash reserves; these come mainly from personal savings, personal borrowing, retained earnings or trade credit with suppliers (Kudo, 2002 and 2005; Kyaw, 2008). Short-term bank loans are available, but limited in business use. The reasons for the informal nature of financing in business include small and underdeveloped banking and finance institutions, high and inflexible interest rates, expensive service charges (in the past, approaching 20% of the financing sought), tight collateral requirements in real estate transactions, limitations on loan amounts based on appraised value of collateral property (up to 40%) and the unavailability of long-term loans (Kyaw, 2008). Transaction costs are high due to strict regulations and cumbersome loan procedures, partially resulting from Myanmar's banking crisis in 2003, as well as a paucity of information available to creditors (no credit bureau yet). These have become significant barriers for the development of business financing in Myanmar.

As a result, access to finance has been one of the most critical issues faced by private enterprises in Myanmar for many years, second perhaps only to electricity shortages (Lynn, 2004; ADB, 2012b). Past business surveys in Myanmar suggest that less than half of sampled private enterprises have access to formal short-term credit. Private enterprises are typically willing to expand their businesses only to levels that their own,

personal finances can sustain (Kyaw, 2008). This constitutes a significant constraint on the ability of firms to grow to sizes where they are efficient and thus lowers overall economic productivity and ultimately economic growth.

An enterprise should have access to a number of financial instruments based on its specific development stage and size (Figure 2.14). This implies that the sophistication and level of development of the banking and financial sector are important factors in sustaining growth. Myanmar presently offers one very basic financing instrument to private enterprises – short-term loan (i.e. less than one year) at a limited volume – due to its underdeveloped banking and financial sector and strict regulations. Neither a public credit guarantee scheme nor a credit bureau/credit information provider has been established yet in Myanmar, although some ministries have discussed the creation of such schemes with international technical assistance. Furthermore, there is no institutional financial support to new entrepreneurs for their business start-ups in Myanmar, except for a small number of microfinance schemes. Needless to say, enterprises in the informal sector – the majority of the business sector in Myanmar – are not eligible to access institutional lending either. This is a critical issue in terms of enterprise development. It greatly limits the growth of the business sector in Myanmar.

Figure 2.14. **Various financial instruments for business**



Source: UNESCAP (2012a), *Policy Guidebook for SME Development in Asia and the Pacific*, United Nations Economic and Social Council for Asia and the Pacific, Bangkok, www.unescap.org/tid/publication/indpub2621.pdf.

The government has encouraged formal microfinance institutions (MFIs) to provide microfinance for small businesses in order to replace informal lenders, which are widespread in Myanmar[31] despite the high interest rates they charge (2-3% per month) (LIFT, 2012). Those MFIs include: *i)* state-owned development banks, such as the Myanmar Economic Bank and the Myanmar Agriculture and Rural Development Bank; *ii)* financial co-operatives under the Ministry of Cooperatives; *iii)* non-governmental organisations

(NGOs), such as Partner Agencies Collaborating Together (PACT), functioning as a UNDP microfinance initiative; *iv)* specialised agriculture development enterprises under the Ministry of Agriculture and Irrigation; and *v)* village revolving funds or community based organisations. Furthermore, the Microfinance Law (2011) and the newly established Microfinance Supervisory Enterprise also allow local and foreign investors to establish fully privately-owned MFIs, whose number is expected to grow rapidly (Duflos et al., 2013).

A range of new policies to develop the business sector are being considered

The government of Myanmar has identified a number of new policies for developing the business sector. The current three-year national development plan entitled "Framework for Economic and Social Reforms" (Ministry of National Planning and Economic Development, 2012) identified several key policies to foster the business sector in Myanmar.

The present government aims to reduce transaction costs for business by improving the legal and regulatory framework for business. The government has been assessing the business climate in Myanmar and is expected to develop a comprehensive institutional and regulatory reform plan for improving the overall business environment. Specific issues which will be assessed are in line with the World Bank (2013b).[32] The Ministry of National Planning and Economic Development has been setting up one-stop centres for business start-ups in Mandalay, Nay Pyi Taw and Yangon. The Ministry of Industry is also planning to open one-stop SME service centres throughout the nation in collaboration with the regional or state chapters of the UMFCCI.

Domestic industrial development has been slow in Myanmar largely due to the impact of international sanctions and the limited availability of institutional loans. Adding to this is the lack of basic infrastructure, such as reliable power. The government aims to increase the industrial share of GDP from 26% to 32% within the next three years, together with an increase in the service sector, reducing the currently high share of agriculture. To this end, the government has opted for trade and investment liberalisation, including the elimination of the export-first trade policy and the revision of the FDI law, as well as the development of the three special economic zones to build industrial bases in Myanmar and develop more diversified exports. A new industry law is also currently being drafted. Upgrading technological institutes and technical schools across the country is planned.

Complementing the previous industrialisation policy, the government has paid special attention to protect and foster domestic SMEs as an engine of industrialisation, income generation and job creation. Ministries involved in SME development and promotion include the Ministries of Industry, Co-operatives, Commerce, Agriculture and Irrigation, Science and Technology and others. The government has been particularly concerned about the impact of the increasing competition from foreign investors and the impacts of the ASEAN Economic Community (AEC) 2015 on SMEs. The Central Department of SME Development was created in April 2012 under the Ministry of Industry. President U Thein Sein has chaired the Small and Medium Enterprises Development Central Committee, and a new SME law is being drafted by the Committee's working group, which is comprised of both government officials and business representatives. The government also aims to facilitate SME cluster formation by linking the existing industrial zones and estates across the country with research and training institutions. The former Myanmar Investment and Commercial Bank is being transformed into the

Small and Medium Industrial Development Bank (SMIDB) to improve access to finance for SMEs and to support business and technology incubations, although at present the bank has limited outreach (i.e. eleven branches throughout Myanmar). The SMIDB plans to offer lower interest three-year loans at 8.5%, as opposed to the standard 13%, which is much lower than typical interest rates for SMEs in developing countries (IFC, 2010), although the feasibility of this plan has been questioned.[33]

Tourism is also identified as a key business sector which will benefit quickly from the present reform process and new development policies. The current visa requirements and procedures will be relaxed and simplified. More hotels and accommodation facilities will be supplied throughout the country, encouraging both domestic and foreign investments. The government plans to develop linkages between tourism and other industrial sectors, such as agriculture and services, to maximise benefits. For this purpose, the government also plans to assist in overall capacity building of the tourism sector, improvement of tourism service management, development of new tourism destinations and marketing and promotion.

To increase access of private enterprises to financial institution financing, the government is currently preparing a financial sector master plan as the basis for major reforms of the banking and financial sector in order to foster healthy competition among private commercial banks and to boost commercial credit as well as various financial instruments available to business. The government has considered allowing commercial banks to extend long-term loans (more than one year) and to use a wider range of collateral instruments, such as moveable assets. It is also considering the establishment of public credit guarantee schemes and a credit bureau (perhaps as a public entity). Expansion of microfinance schemes for entrepreneurs, including women and youth, is another policy being examined to improve access to needed capital and to reduce reliance on informal money lenders. The government also plans to expand the schemes for trade finance, particularly for exports of manufactured goods.

Finally, the government has accelerated the reform process of state-owned enterprises, many of whom have recorded substantial losses in the past several years (CSO, 2013). Since the middle of the 1990s, a number of SOEs have been corporatised and/or privatised to foster private investment and reduce government subsidies and soft loans from state development banks. However, this process has not been transparent due to lack of clear formal procedures and monitoring and evaluation mechanisms, as it has been typically implemented by individual line ministries on an ad hoc basis. It is expected that the government will implement further reforms in a gradual but transparent manner, perhaps including the establishment of a public auction and open tender system for public asset sales as well as a valuation, appraisal and securitisation system. While proceeding with such reforms in the industrial and services sectors, the government has taken a more cautious approach in privatising SOEs in public utilities, natural resources and infrastructure industries, such as energy, mines and telecommunications. The government also aims to enhance the institutional capacities of SOEs by strengthening financial discipline as well as incentives for profit-making, and perhaps providing management training.

Accumulating human capital for the future

Sustainable economic development in Myanmar is conditional on the availability and quality of human capital. A prerequisite for providing adequate skills needed by the labour market is access to high quality basic education (defined by primary and non-

vocational secondary education). While most of Myanmar's adult population has learnt the most basic skills, including reading, writing and arithmetic, and access to formal education has improved over the last twenty years, school dropouts at the primary level and low enrolment rates at the secondary level imply continued challenges in terms of access to education. Quality issues related to education have recently been addressed through upgraded teacher training programmes and revised curricula, but better tools to measure educational attainments of students and teacher quality need to be developed.

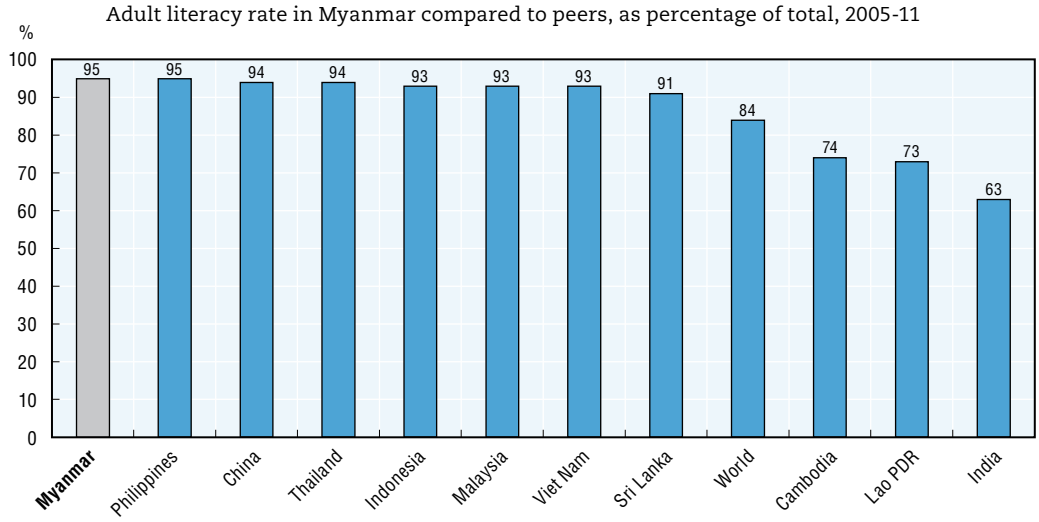
Many low- and middle-income countries have difficulty moving up the value chain due to a lack of adequate and specific professional skills (OECD, 2013c). Taking fast-growing emerging and already industrialised economies as benchmarks indicates that Myanmar has not yet fully accumulated the set of skills which may be demanded in the years ahead. Stronger focus on vocational training and a higher proportion of tertiary graduates in education and health is essential. Overall, spending on education at all levels has to be boosted to address the challenges ahead.

Myanmar is at the doorstep of broad-based access to basic education

Most adults in Myanmar are capable of basic reading, writing and arithmetic. According to official statistics, the literacy rate was 95% in 2011, up from 71% in 1973 and 91% in 2000. If these figures are accurate, literacy in Myanmar is at par with that in middle-income countries such as China, the Philippines and Thailand (Figure 2.15). Other least-developed countries (LDCs) in the region as well as India report significantly lower literacy rates.

Figure 2.15. **Myanmar has high rates of adult literacy**

Adult literacy rate in Myanmar compared to peers, as percentage of total, 2005-11



Note: Figure for Myanmar corresponds to 2011. Figures for all other countries correspond to most recent data available between 2005 and 2010. UNESCO defines literacy as the ability to read and write with understanding a simple statement related to one's daily life. It involves a continuum of reading and writing skills, and often includes basic arithmetic skills (numeracy). The definition of the Ministry of Education is largely in line with that of UNESCO.

Source: Ministry of Education (2012), *Education Development in Myanmar*, The Republic of the Union of Myanmar and UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/.

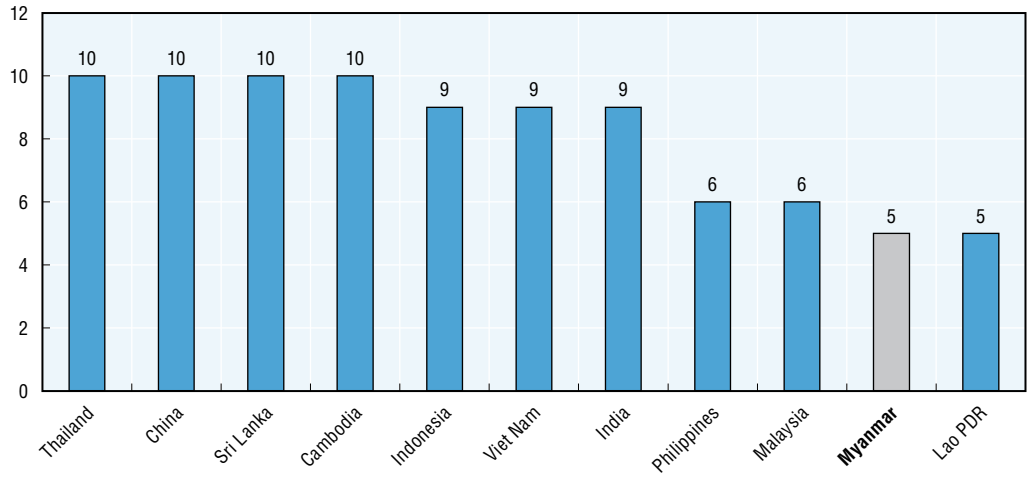
StatLink *http://dx.doi.org/10.1787/888932857596*

High literacy attainment in Myanmar is the result of a nation-wide adult literacy programme introduced in 1973, several summer literacy programmes underway since 1996 as well as first initiatives within the long-term education development plan (2001-30). These programmes mainly target full access to primary and improved access to post-primary education. Within the Non-Formal Primary Education Programme, for example, adolescents get the opportunity to learn in out-of-school hours (evenings) in order to accommodate farmers' labour constraints during harvest periods.[34] Another example is the Income Generating Programme, which provides financial incentives for parents to educate themselves and bring their children to school.

Furthermore, monastic and private schools play an increasingly important role in the provision of primary education. About 3% of all primary school students are taught in monastic schools. Compared to public schools, monastic schools seem to be more accessible for poor pupils as they don't charge fees and provide free meals and school materials. Also, the re-legalisation of private schools since the 1990s helped to accelerate access to basic education, particularly in recent years. Private institutes provide full-time and supplementary programmes. Many children from wealthier families go to supplementary private schools, for example, to improve their English skills or to prepare for admission tests to education abroad (Lall, 2008). With the approval of the Private School Registration Act 2011, the government's willingness to allow basic education through non-state institutions is reaffirmed.

Figure 2.16. **Myanmar has fewer years of compulsory education than its peers**

Years of compulsory education, 2010



Source: UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/.

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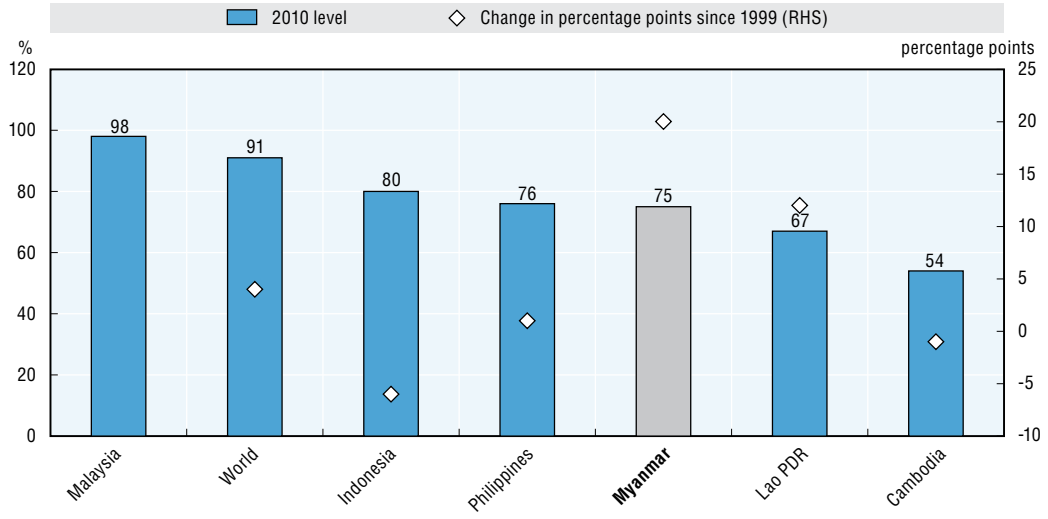
Broad access to education does not go far beyond the most fundamental literacy skills given the low number of legally guaranteed and compulsory school years. Only primary school (age 5-9) is compulsory. In this respect, Myanmar lags far behind most countries in the region. For example in Thailand, China and also in LDCs like Sri Lanka and Cambodia, compulsory education includes secondary education and lasts ten years, twice as long as in Myanmar (Figure 2.16). The government's engagement to fulfil its mandate to provide free and compulsory primary education, for example, by building new primary schools in border regions as well as NGO engagements to bridge the gap of shortages with regard to

school materials, have made it possible to increase the net intake rate of formal primary education at the age of five to 98.5% in 2011, up from 67% in 1988. However, despite compulsory primary education, only about 75% of the pupils reached the last grade of primary education in 2010 (Figure 2.17) and only 69% finished the last grade.

Overall, formal and informal initiatives to increase access to basic education have been successful. The survival rate to the last grade of primary education improved by 20 percentage points since 1999 (Figure 2.17, dots in diamond-shape). Both Cambodia and Lao PDR, which had – like Myanmar – a low survival rate of 55% in 1999, report considerably smaller improvements during the same period. Furthermore, improved access to primary education – not only for the primary school-age population but also for older children or adults who may not have had the chance to benefit from primary education at an earlier age – is reflected in the gross enrolment ratio (GER).[35] Myanmar has with 126% one of the highest GERs in the region, up by 25 percentage points since 1999 (Figure 2.18, Panel B). Myanmar's GER above 100% indicates that some of the enrolled pupils are actually older than the official primary-school age.

Figure 2.17. **Improving primary education attainment rates**

Survival rate to last grade of primary education in Myanmar compared to its peers, 2010



Source: UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/.

StatLink *http://dx.doi.org/10.1787/888932857634*

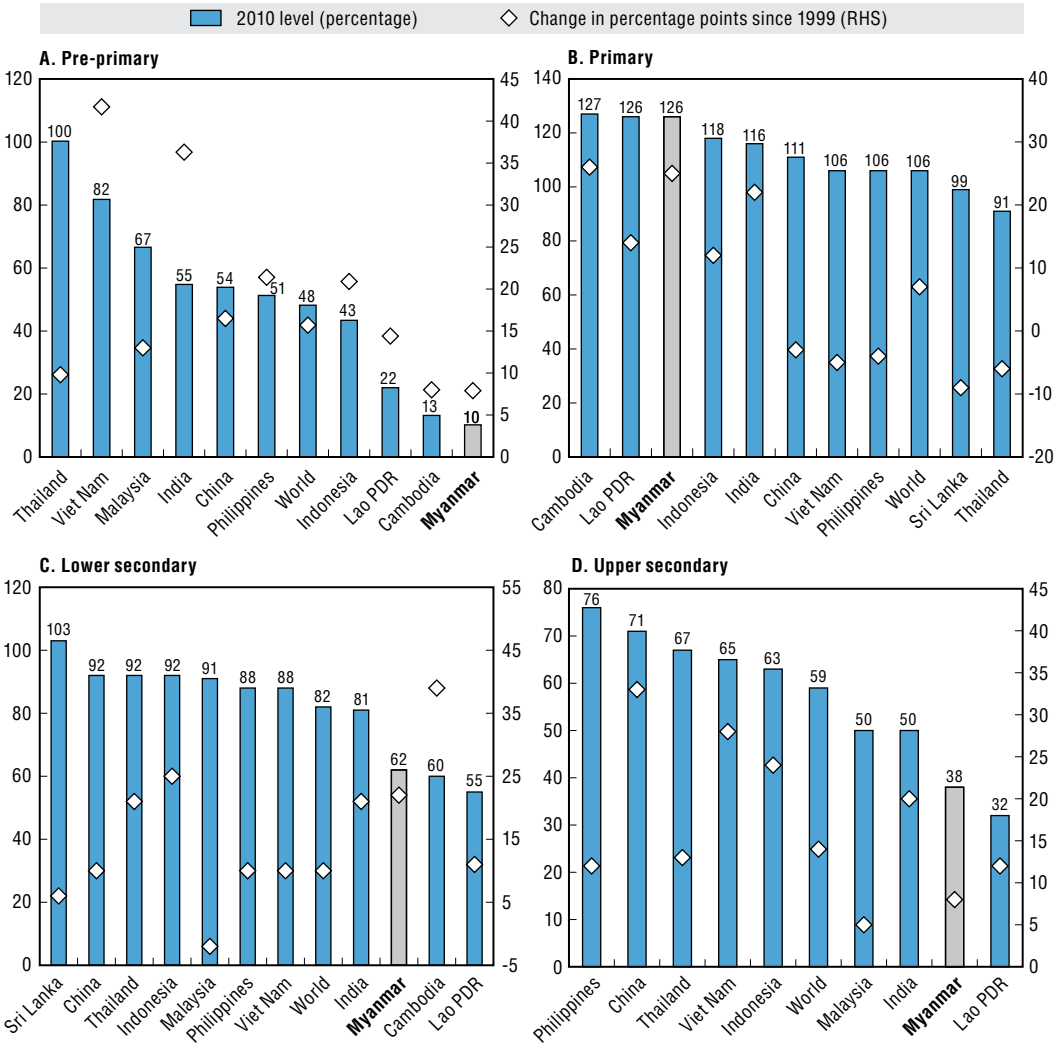
Nevertheless, the non-mandatory characteristic of pre-primary and secondary education is still reflected in relatively low access to these school levels. The GER in pre-primary education of 10% in 2010 was very low compared to the 54% in China, 55% in India and 100% in Thailand (Figure 2.18, Panel A). However, the government's commitment to the strengthening of pre-primary education has translated into very strong growth of pre-primary enrolments; the GER has increased over fourfold since 1999. In 2011, more than 2 500 schools provided pre-school education; ten years before this number was below 500.

Similarly, the GERs in Myanmar for lower and upper secondary education, at 62% and 32% in 2010, respectively, are clearly lower compared to middle-income countries in the region. To facilitate access to secondary education in villages where no secondary school

existed, the government has allowed upgrading of primary schools to post-primary, affiliated or branch schools since 2001. The policy (together with those mentioned above) seems to be successful: the GER for lower secondary education has improved by more than 20 percentage points since 1990 (Figure 2.18, Panel C); while that for upper secondary education increased by 8 percentage points over the same period (Figure 2.18, Panel D).[36]

Figure 2.18. **Starting from low levels, access to non-compulsory education is improving**

Gross enrolment ratio at different levels of basic education in Myanmar compared to its peers, 2010



Note: The gross enrolment ratio is defined as the number of pupils enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. Compulsory education refers to five years of primary education only.

Source: UNESCO (2013), *UNESCO Institute for Statistics Data Centre* (database), United Nations Educational, Scientific and Cultural Organization, http://stats.uis.unesco.org/.

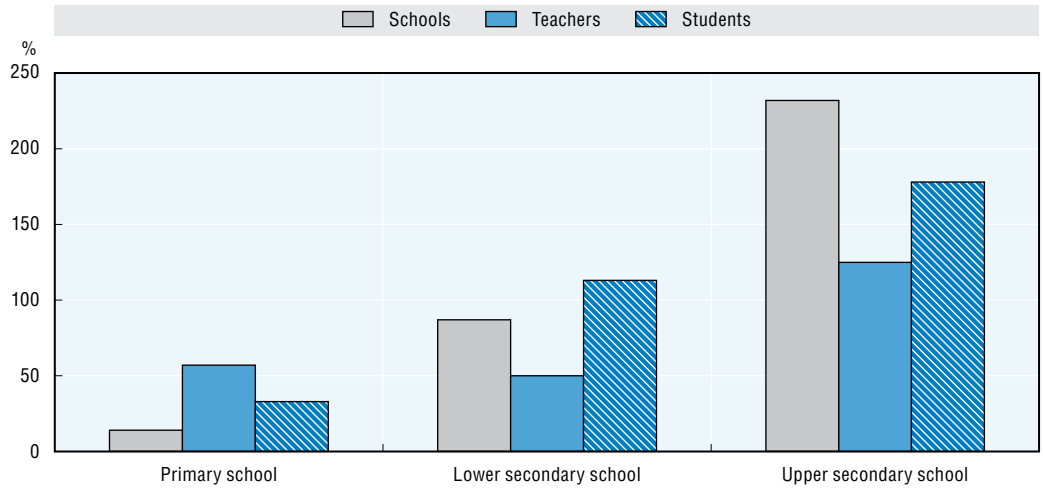
StatLink *http://dx.doi.org/10.1787/888932857653*

Policies are also focusing on boosting inputs to the educational system, notably teachers and finance

During the last two decades, the government in Myanmar has made strong efforts to hire more teachers and to build new schools to facilitate access to basic education at all levels (Figure 2.19).[37] The number of pupils per teacher seems to have improved at the primary level, but the strong increase in the number of secondary school students has outstripped the considerably slower increase of teachers hired.[38] At the lower secondary level, students have doubled between 1988 and 2012, but the number of teachers has risen only by 50% during the same period. Similarly, for upper secondary school, the number of students almost tripled, but the number of teachers only increased by a factor of 2.25. This trend is reaffirmed when looking at pupil to teacher ratios: at the primary level the ratio improved from 31:1 in 1999 to 28:1 in 2010; whereas at the secondary level the ratio has worsened over the same period, from 30:1 to 34:1. For both school levels, these ratios are clearly higher compared to those of most neighbouring countries. For example in China, the pupils per teacher ratios are 17:1 and 15:1 for primary and secondary school, respectively.

Figure 2.19. **The number of teachers needs to grow with the student population**

Growth of the number of schools, teachers and students at different levels of basic education, 1988-2012



Source: Ministry of Education (2012), *Education Development in Myanmar*, The Republic of the Union of Myanmar.

StatLink *http://dx.doi.org/10.1787/888932857672*

While existing initiatives have met with some success, the sustainable provision of basic education for all – which should be guaranteed by the central government and not be dependent on non-formal or private initiatives – can only be achieved through a well-thought-out increase in government spending on education (Box 2.10).[39] To assess in which areas increased education spending is needed, the constraints to education access need to be identified. On the one hand, access to basic education is conditional on logistics, including the availability of school facilities and teacher training institutions, transportation to schools and teaching materials. On the other hand, access is also dependent on the right incentives of key stakeholders involved in education. Among others, incentives to be trained and work as a teacher must be adequate to fill the demand for teachers. Also, in a country like Myanmar where about two-thirds of the population lives in rural areas, incentives for teachers to work in those regions must be made available. Furthermore, families must have the financial means to send their

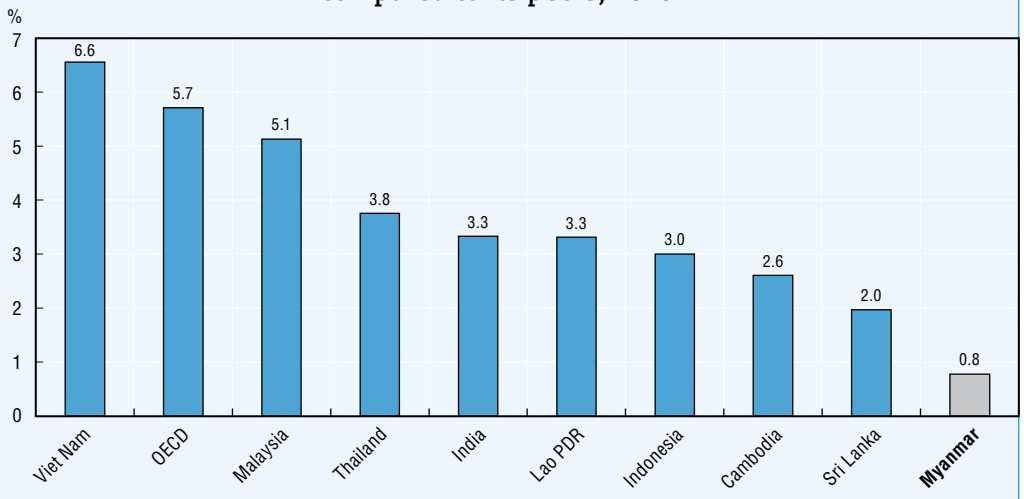
children to school. These financial means include the direct expenses on education but also costs associated with the loss of labour when children go to school (for example, work performed by children on a farm). Traditionally, education in Myanmar is highly valued by families and communities; however, if parents do not see education as an investment for future success, they may resist sending their children to school.

Box 2.10. **Public expenditure on education**

Under military and socialist rule, Myanmar substantially neglected education investments. Government expenditure on education decreased from almost 3% of GDP in 1972 to about 0.5% in 2000. Recent reforms have led to a slight increase of that share, namely to 0.8% of GDP in 2011. Education spending corresponds only to around 2-3% of total government spending. The government has recognised the need for more education investments and has therefore increased the education budget to around 6% for the next fiscal year and has planned further increases in the future. Taking middle-income countries in Asia as benchmarks confirms that government plans to reallocate funds towards education are appropriate. Thailand reports education expenditures of almost 4% of GDP and Malaysia and Viet Nam of more than 5% (see figure in the box). These shares correspond to around 20% of total government spending on education.

In 2011, Myanmar allocated half of its education spending to primary school education and another 24% and 19% to secondary and tertiary education, respectively. A stronger concentration on primary education in Myanmar compared to other countries is most likely related to the fact that only primary education is compulsory. For example in India and Malaysia primary school spending makes up only one-third of total education spending. Another third is spent on secondary and tertiary education, respectively. Taking these countries as benchmarks, Myanmar may thus have to reallocate education spending towards secondary (including vocational) and tertiary education in the medium term.

Public expenditure on education as percentage of GDP in Myanmar compared to its peers, 2010



Note: The figure for Myanmar is based on 2011 data. The OECD average is based on 2009 and 2010 data.
Source: World Bank (2013a), *World Development Indicators* (database), http://databank.worldbank.org.
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Quality upgrading of basic education is under way

Since the end of the 1990s, pre-service teacher training institutions have been restructured and upgraded. Today, all existing institutions are affiliated with the Institutes of Education and are subject to requirements that students have successfully completed upper secondary school and have passed the higher education entrance examination.[40] After successful completion of the one-year programme at an Education College, students receive the Certificate in Education, which allows them to teach at the primary school level as Primary Assistant Teachers (PATs). Students receive the Diploma in Teacher Education qualifying them to teach at the lower secondary level after successfully completing an additional year at the College. With one year of experience in primary school, those educators are promoted to the status of Junior Assistant Teachers (JATs). Holding a Diploma allows students to apply for entry into an Institute of Education to receive a Bachelor of Education by passing a third year. Bachelor degree holders are appointed as senior assistant teachers (SATs) in upper secondary schools. In the Institutes of Education in Yangon and Mandalay, students can also acquire a Master of Education with one more year of study. A Master degree is the minimum requirement to work as an academic staff member in a higher education institution.

While the restructuring and upgrading of teacher training institutions has led to a more co-ordinated system of teacher training, the durations of training for the respective levels have not been extended and practical pre-service trainings are still not part of the curriculum. Teacher trainings in Myanmar are clearly shorter compared to programmes in more developed countries, which often require a Bachelor of Education degree (three-year programme) to teach in primary and lower secondary schools. This is further illustrated by a relatively low (3%) share of higher education graduates with a specialisation in education in total graduates compared to shares above 10% in countries like Germany, Hungary or the United States (Figure 2.20). Furthermore, short-term traineeships under the supervision of experienced teachers at the respective school levels – an important component in programmes of most OECD countries – are not integrated in Myanmar's teacher training programmes.

To reduce the percentage of teachers without a nationally accepted teaching qualification in Myanmar, several in-service training programmes have been implemented during the past two decades. The duration of these programmes is six months. Courses are provided during weekends and focus on developmental and psychological aspects of the children, theories of learning, preparation of lessons, development and utilisation of teaching aids and evaluation techniques. Teachers passing the examination are awarded the Certificate or the Diploma of Education for primary school and lower secondary school teachers, respectively.

In-service teacher trainings have proven to be extremely successful: while in 1999 only 60% of primary school teachers were holding a respective qualification to teach, official statistics suggest that in 2010 all primary school teachers were certified to teach at that level. Similar improvements were reported for the secondary school level: the share increased from 69% to 99% over the same period. Other LDCs in the region also have high percentages of trained teachers at the primary level, but perform worse at the secondary school level; for example in Lao PDR, the percentage of trained secondary school teachers was only around 85% in 2010.

Finally, the quality of the educational process, including the curriculum as well as learning and examination methods, has recently been improved. Revisions of

the curriculum at the primary and lower secondary school levels in 1998 and 2001 introduced core subjects such as life (or health-related) skills, natural science, morality and civics along with social studies including decision making, communication skills, interpersonal relationships, empathy, critical and creative thinking, coping with emotion and stress and fostering self-esteem and self-expression. Vocational subjects such as industrial and fine arts, agriculture as well as home economics were introduced at the lower secondary school level. Additionally, a new assessment programme focuses on a Comprehensive Personal Record (CPR) and more frequent testing in order to avoid the burden of final examination. The pupil's progress is thus assessed continuously and takes into account her/his all-around abilities. With these revisions, Myanmar has kept up with and is more reflective of its rapidly transforming society and is allowing for a comprehensive development of the students.

Although quality monitoring initiatives (such as school inspections) were introduced recently, better tools to assess quality improvement policies should be introduced. Participation in PISA, an international study launched by the OECD in 1997, would be one option. It evaluates basic education systems worldwide by assessing 15-year-olds' competencies in the key subjects: reading, mathematics and science. Policy makers use PISA to determine the knowledge and skills of students in their own country compared to those of other participating countries or economies.

Adjusting the supply of skills to future demand will be essential to sustain growth

Along with the transformation of the Myanmar economy, a new and most likely wider range of skills will be needed. Due to a lack of adequate and specific skills, many middle-income countries have difficulty moving up the value chain. Investment in human capital is either insufficient or not adapted to labour market needs. To identify what professional skills, that is vocational and tertiary skills, are potentially needed as Myanmar's economy grows, the skill-mix of fast-growing emerging or developed countries can be used as a benchmark.

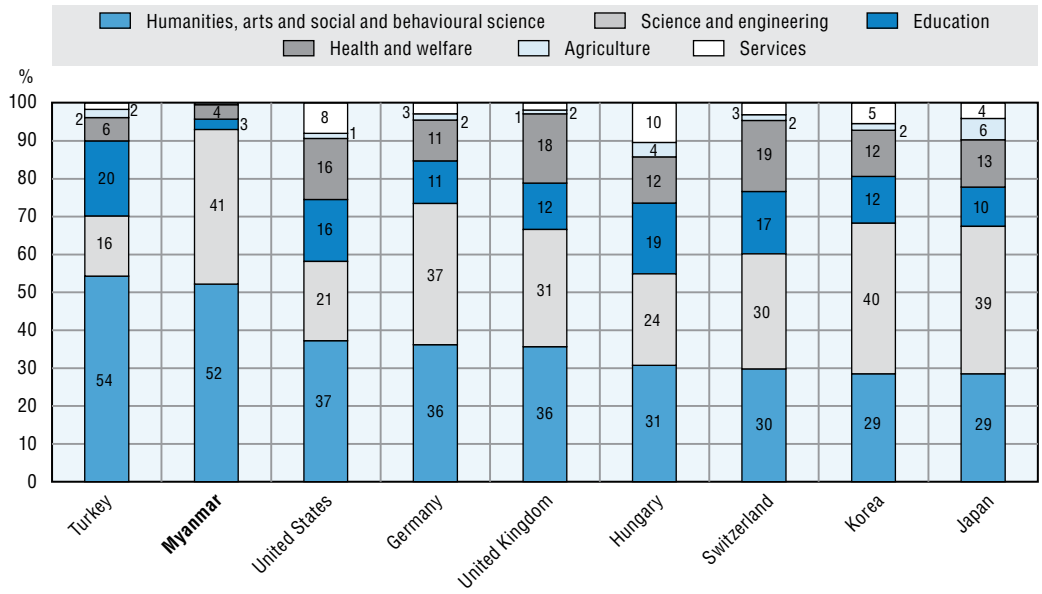
Since the beginning of the democratisation process, the government has sought to establish new higher education institutions to promote equitable educational development and access among the various regions in Myanmar. The number of institutions increased from 32 in 1988 to 164 in 2012. At the same time, new academic programmes at undergraduate and postgraduate levels were introduced in order to promote access to a broad set of possible specialisations. The number of higher education programmes under the Ministry of Education increased from 79 to 215 between 1988 and 2012.[41] The number of enrolled higher education students increased fourfold during the same period; in 2012 around half a million students were enrolled.[42] The gross enrolment ratio (GER) in tertiary education was 12.4% in 2001. Given the sharp increase of the absolute number of enrolled tertiary students during recent years, this ratio is likely to be higher today and thereby closer to benchmark countries in the region, such as China with a GER of 26% or India of 18% in 2010. The GER in tertiary education is often above 50% in OECD countries.

The fast increase in terms of quantity of higher education may have come at the expense of its quality. Given the limited budget for education in general, several ministries have recognised that the quality and control of higher education was lagging behind (see Box 2.10). In order to increase quality, the Ministry of Health reported for example that the number of doctors trained was recently downsized by one half from around 2 500 new students each year. Also, the Ministry of Science and Technology has reduced enrolment numbers for diplomas from 30 000 to 16 000 for the same reason.

Looking at the specialisation mix of graduates in tertiary education, a strong concentration on humanities, arts and social science stands out alongside science and engineering, potentially at the expense of education, health, management and entrepreneurship skills. Myanmar's share of graduates in the former group of fields is 52%, 10-20 percentage points higher than that of OECD countries such as Japan, the Republic of Korea or the United States. At the same time, a potentially insufficient share of human capital accumulation in education and health may have become apparent. Only 3% and 4% of Myanmar's higher education students graduate in education and health, respectively, compared to more than 10% in selected OECD countries (Figure 2.20). The share of graduates in science and engineering seems to be at par with that of more advanced countries. Since 2004 each year around 50 000 students have graduated in science and engineering schools. This is impressive given that the total of 61 universities and colleges offering degree programmes in science and engineering were established only recently; in 1988 none of those institutions existed.[43] Furthermore, the gradual opening of the economy will increase demand for augmented entrepreneurship and management skills in Myanmar. While economics and commerce programmes exist within humanities, to date no public business or management school exists. A stronger focus on the accumulation of those skills will therefore be needed in the future.

Figure 2.20. **Students in Myanmar focus on arts and sciences**

Share of graduates of higher education by specialisation in Myanmar compared to selected OECD countries, 2010-11



Source: Ministry of Education (2012), *Education Development in Myanmar*, The Republic of the Union of Myanmar and OECD (2013d), *OECD.Stat* (database), http://dotstat.oecd.org/.

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Besides the accumulation of higher education skills, an industrialising Myanmar will need strong mid-level technical and vocational skills. Technical and vocational training is mainly co-ordinated by the Department of Technical and Vocational Education of the Ministry of Science and Technology.[44] Training of technicians is undertaken in government technical institutes and training of skilled workers or basic craftsmen in technical high schools. Both institutes and schools also offer part-time courses for those already employed. Almost 30 000 technicians and 4 000 skilled workers were trained

(have passed examinations) in those institutions in 2010-11. These numbers reflect a progressively stronger focus on vocational training during recent years: only around 1 500 technicians and 1 000 craftsmen were trained in 1990-91. Agricultural institutes and co-operative colleges as well as non-governmental vocational schools trained an additional 8 300 workers in 2010-11 (compared to only 3 800 workers in 1990-91).[45]

Despite the recent increase, the number of students passing vocational education examinations corresponds to less than one third of the number of ordinary upper secondary school graduates in 2010-11. Given that access to ordinary upper secondary education is itself limited (the GER is only 38% in 2010), this implies that a considerable proportion of adolescents in Myanmar complete neither ordinary secondary education nor vocational training. In the medium term, a sophisticated and formal apprenticeship program like the one in Switzerland might be considered for Myanmar (Box 2.11).

Box 2.11. **Swiss apprenticeships: A possible model for Myanmar**

In the Swiss educational system, after ten years of compulsory schooling, students can continue general training or start a three-to-four-year apprenticeship. Approximately two-thirds of young people reaching the end of compulsory schooling choose to do an apprenticeship.* The distinctive feature of apprenticeships in Switzerland is the alternation of classroom learning and work experience in a company. In this so-called dual system of learning, students spend one or two days per week in a vocational training school and work in the firm for the rest of the week. Around 230 training options are available; business and health-related training are chosen most often.

The strength of the apprenticeship system in Switzerland compared to those in other countries is firstly that the training schemes are permeable, so that trainees can take up higher learning opportunities (including at universities) later or change activity during their career without wasting time. The partnership of companies, professional associations, the state and schools is another important ingredient. In fact, all these stakeholders are involved in the development of school curricula, which allows them to be adjusted according to changes in market demands and other circumstances. Finally, trainees contribute to production and most often generate profits for the company by the end of their training. Besides the economic benefit, apprenticeships generate qualified staff for the future, provide a young and dynamic touch to the company and improve the company's image (Petitjean, 2012).

A similar system of apprenticeships – the so-called Center for Vocational Training (CVT) – was initiated by a private association in Yangon about ten years ago (Jorio, 2012). The number of apprentices doubled to 450 between 2010 and 2012. The system now has 500 partner companies and offers five different programs; namely, commercial clerk, carpenter, electrician, engineer and hotel assistant. While the CVT enjoys the support of public authorities in Myanmar, it is still financed by aid contributions from abroad. Incorporating this pilot project into public educational planning would put Myanmar's vocational training system at the forefront of the region.

Note: * This figure corresponds to the net intake rate of vocational trainees at the age of 16 (end of compulsory schooling) and is clearly above the GER rate of 33% reported in the main text.

First and foremost, to better identify future skill demand in Myanmar, the co-ordination of the education system between ministries needs to be improved. Today, the responsibility for education is divided between more than a dozen ministries and has thus led to significant inefficiencies and potential misallocations of educational resources. Ideally, only one ministry would be responsible for the provision and

quality of education at all levels. Better co-ordination of profession-specific education (higher education as well as vocational training) is particularly needed. Furthermore, a thorough analysis of the labour market will be needed to examine where unemployment is concentrated and how salaries in different sectors (including public vs. private sector) compare, among each other and with other countries. Also, employer surveys may be used to identify present and future skill needs of firms and public organisations. Employers' responses to such surveys can help guide policies to meet labour market needs more effectively and ensure that the right skills are being taught through vocational training and the wider education system.

Accumulating physical capital

Myanmar needs to rapidly accumulate physical capital (infrastructure and business assets) to sustain its growth and to meet its development targets. In particular, the country's infrastructure – its transport networks, energy infrastructure and telecommunications systems – is in need of urgent upgrading and expansion. Myanmar ranked 95th out of 104 countries in the 2005 RIS Infrastructure Index which takes into account transport, ICT, energy and banking (Kumar and De, 2008). This upgrading and expansion of infrastructure will need to be supported by a more effective institutional setting, which at present is overly complex.

Infrastructure is essential for development. Beyond the addition of capital stock, it can boost growth indirectly. Investment in infrastructure can lower the cost of production and of trade and open new markets and new production opportunities. A strong transport and communications infrastructure network also connects more people together and enables marginalised or excluded communities to access core economic activities and services. Even the very production of infrastructure itself can boost growth by creating a demand for outputs from other sectors, often locally sourced, thereby creating employment, boosting disposable incomes, consumption and ultimately growth.

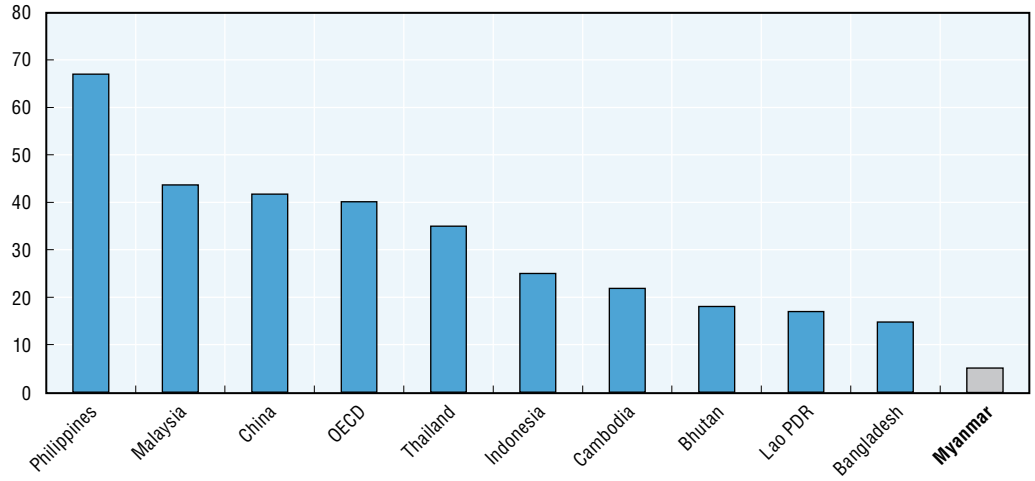
Major projects are underway or planned to upgrade transport systems

Institutional complexity means that responsibility for transport policy, planning and construction is divided between several ministries. The Ministry of Construction is responsible for roads and bridges, except for the roads and bridges in border areas and rural areas, which are under the responsibility of the Ministry of Border Affairs. The Ministry of Transport is responsible for aviation and maritime transport. The Ministry of Rail Transportation is responsible for the country's railways. While responsibility is split across so many bodies, it will be very difficult to develop an overarching, cohesive transport strategy which identifies priorities and allocates funding to those priorities.

Road density in Myanmar is extremely low (Figure 2.21) and not all townships are reached by the country's road network. Road quality is also an issue: just 21.7% of the country's roads are paved. The government is planning to upgrade much of the road network from the earth roads to gravel/bitumen roads and also to widen roads. Highways, such as the Yangon-Mandalay road, have been built and are being upgraded. A number of international highways have been constructed to improve connectivity within the Southeast Asian region. They include the ASEAN highways (eight in total), Asian Highways (four routes pass through Myanmar) and the GMS highways (three in total). Further upgrading and/or expansion of these routes are planned with the help of international co-operation and financial assistance.

Figure 2.21. **Road density is extremely low**

Road density (km of road per 100 sq. km of land area), 2010



Note: All data are from 2010 except for Philippines (2003), Thailand (2006), Indonesia, Cambodia and Lao PDR (2009).
Source: World Bank (2013a), *World Development Indicators* (database), http://databank.worldbank.org.
StatLink *http://dx.doi.org/10.1787/888932857710*

The current rail network is very run-down due to under-investment and insufficient maintenance over past decades. The 5 768 km network runs north to south with branch lines to east and west, but does not connect with neighbouring countries. There are plans to integrate the rail network into the Trans-Asia Railway, a project that will create an integrated freight railway network across Europe and Asia. China plans to construct a major rail line to connect Kunming, Yunnan province with the Kyaukpyu deep sea port on the west coast of Myanmar, and another one to Yangon and further south to the Dawei port project. Another route is planned from Kunming through Shan state to Thailand.

The Ayeyarwady and Chindwin rivers are the main waterways and play an important role in the county's transport network: in 2002, about 44.39% of the total freight-ton was transported via the inland water transport system (Thein, 2008). However, low water levels in the summer prohibit navigation by larger vessels. Myanmar has nine ports along the Bay of Bengal, although only four of these can handle international maritime transport. Between 2011 and 2016, the government plans to develop the Yangon port area, upgrade the Dala dockyard, establish five new international shipping terminals in the Thilawa port area and construct six new domestic ports along the Ayeyarwady and Chindwin rivers as well as to expand their shipping fleet.

To strengthen aviation capabilities, the government is planning to improve or upgrade the 14 airports at which scheduled flights are operating and to build a new Hanthawaddy International Airport. It also plans to modernise aviation systems, processes and training, all with the goal of increasing the number of flights on domestic and international routes.

Energy resources are vast but the infrastructure is presently insufficient to meet the country's needs

Compared to its energy generation potential, Myanmar's installed capacity is low. The country has 19 hydropower plants supplying 2 660 megawatts (MW), 10 natural gas plants supplying 715 MW and one coal-fired power station built in 2005, which supplies around 120 MW. Although the total installed capacity is nearly 3500 MW, hydropower cannot run at full capacity all year round. During the drier summer months, generation capacity drops to about 1500 MW, leading to frequent power cuts. The government partially addressed this problem by switching from hydropower to thermal power for the base load, with hydropower used for peak load.

Electrical power generation and distribution is a major problem in Myanmar. Some areas, particularly rural areas, are completely without electricity. The electrification rate is 49%, with notable urban-rural differences: just 28% of the rural population has access to electricity compared to 89% in urban areas. This means that some 26 million people are without electricity (IEA, 2012). Even in areas served by electricity, power shortages are frequent, disrupting people's everyday lives, businesses and community services. Installed capacity has been increasing, but demand is still greater than supply: in the dry period, only 75% of the demand is met. In addition, about one-third of the total power generated is lost between the power station and its final destination, the consumer (Thein and Myint, 2008). This high loss rate is due to the poor state of the ageing transmission infrastructure and the stealing of power, compounded by the often long distances needed to transport power from the source of its generation to the final consumer. The lack of reliable electricity supply is a major deterrent to companies considering establishing manufacturing operations in the country.

Yet the country's energy generation potential is large. Hydropower is under-exploited: the country has a theoretical hydropower potential of over 108 000 MW and 366 000 Gigawatt-hour (GWh) per year of energy in its river systems and an identified reserve of 39 720 MW (Thein and Myint, 2008). Coal reserves are estimated at 711 million tons spread over 15 coal deposits. The country also has substantial onshore and offshore oil and gas reserves. Recent assessments estimate that the Central Burma Basin and the Ayeyarwady–Andaman and Indo-Burman Geologic Provinces together have undiscovered but technically recoverable resources of 2.3 billion barrels of oil, 79.6 trillion cubic feet of gas and 2.1 billion barrels of natural gas liquids (USGS, 2012). A lack of technology, particularly for offshore exploration and extraction means that this potential is unlikely to be exploited without foreign co-operation and technology transfer.

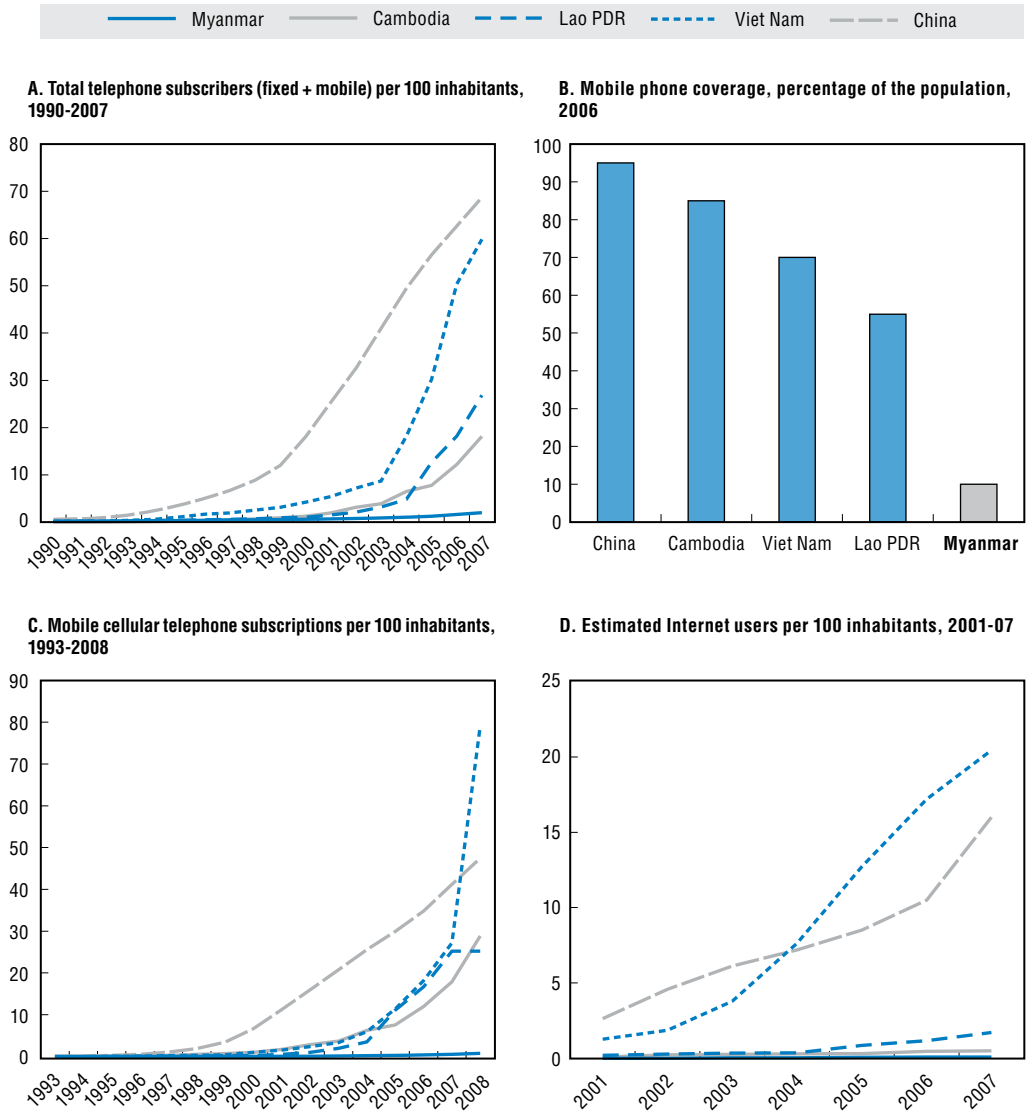
The Shwe and Zawtika are two major oil and gas projects due to come online in 2013, but they will serve primarily foreign rather than domestic energy demand. The Shwe twin pipelines will transport oil from the Middle East and Africa and natural gas from Myanmar's offshore gas field in the Bay of Bengal to China's Yunnan province. The Zawtika project will transport natural gas from south-eastern Myanmar to Thailand.

If the country is to meet its development objectives, meeting the rising domestic energy demand will need to be a priority. The Ministry of Electric Power plans to build and/or extend an additional 17 power plants for electricity generation between 2013 and 2016 (10 natural gas and 7 hydropower), increasing installed capacity by 2 192 MW. An additional 310 MW will come from planned wind and solar power farms to be built between 2013 and 2016.

Telecommunications capabilities are limited in coverage and quality

Modern telecommunications can be a great enabler for development. Internet and mobile technology open up a whole host of opportunities, from reducing transaction costs for business and boosting access to finance through mobile banking, to extending the reach of healthcare through e-health services and improving transparency by easing the flow of information, among many other things. Currently, the telecommunications sector is under-developed in Myanmar (Figure 2.22).

Figure 2.22. **The telecommunications sector is under-developed**



Source: ITU (2013), *International Telecommunication Union* (database), International Telecommunication Union, www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx.

StatLink *http://dx.doi.org/10.1787/888932857729*

Telephone (fixed and mobile) and internet penetration are both very low in Myanmar. In 1990, the number of telephone subscriptions per 100 inhabitants was higher in Myanmar than in Cambodia, Lao PDR and Viet Nam, but by 2007 the rate in Myanmar had barely increased whereas Viet Nam had seen a 400-fold increase (Figure 2.22, Panel A). Furthermore, the quality of phone services is very poor: there are frequent failures to connect and lines often drop.

Mobile phone coverage serves just 10% of the population (Figure 2.22, Panel B), well below the coverage of its regional peers. More than 55 000 villages are still without mobile service. The government has ambitious targets in this field, aiming to reach 75-80% mobile penetration by 2016. The poor coverage is one of the reasons why just 0.8 per 100 inhabitants have a mobile phone subscription (Figure 2.22, Panel C), again, well below its neighbours. The cost of mobile services is also prohibitive. Whereas the average income in Myanmar is USD 60-70 per month, the cost of acquiring and activating a smartphone is USD 563.11 (Open Technology Fund, 2013). In January 2013, a SIM card for a mobile phone was around USD 250, putting it beyond the reach of many.

Until recently, the government ran all telecommunications in the country and monopolies characterised the market. For example, monopolies over the rights to sell SIM cards kept prices high: powerful businessman Tay Za's Htoo Trading gained exclusive rights to sell SIM cards for 800 MHz CDMA mobile phones in January 2010. By August 2011, four companies, all with connections to the regime, gained the rights to sell four million GSM phones and to construct communications bases throughout Myanmar. The country currently has two operators, one controlled entirely by the Ministry of Posts and Telecommunications and one partly government owned. Myanmar has shortlisted 12 telecoms groups to bid for two nationwide telecoms licences lasting 15 years, and intends to announce the winners by mid-2013. This should bring more competition to the market, bringing down prices. The entry of foreign firms into the telecoms sector should also improve service due to the transfer of technology and know-how.

Internet usage is very low in Myanmar at just 0.08 users per 100 inhabitants (Figure 2.22, Panel D). Again cost is a prohibitive factor. The limited internet infrastructure means that internet use is frustratingly slow and unreliable and does not assure the secure transfer of confidential information. At least 10 Gbps is available in the country, and all landline and wireless communications come through a single connection, the South-East-Asia/Middle East/Western Europe Optical Submarine Cable (SEA-ME-WE 3). All traffic runs through the "international gateway" that is on Prome road or PY1. As this limited connection restricts speeds, the government is planning to expand to another optical submarine cable (SEA-ME-WE 4). Currently, the majority of Internet access in Myanmar is obtained through Internet enabled mobile devices. Although the government has partnered with a Singaporean company to upgrade the country's fibre optic network, the focus is on mobile internet, with the intention of expanding existing mobile and wireless networks. Myanmar has three internet service providers, MPT, which is entirely government-owned, Yatanarpon Teleport (51% government held, 49% privately held) and Red-link Group, owned by family members of government leaders (Open Technology Fund, 2013).

Notes

1. The four licences were handed over to the four tycoons of Tay Za, Zaw Zaw, Nay Aung, and Chit Khaing.
2. In addition, the foreclosure procedure is long, often taking a couple of years. The foreclosed assets are auctioned by the court.
3. The Microfinance Business Law was passed and enacted in 2011 and there are 1 200 institutions countrywide. Licenses are issued by the Microfinance Supervisory Enterprise (under the Ministry of Finance). For deposit taking microfinance institutions the minimum capital requirement is 30 million kyats and for non-deposit taking ones 15 million kyats. Deposit taking is authorised only from members, not from the general public.
4. The Myanma Economic Bank appears to be the model to follow in setting loan-to-value ratios. At the time of the writing of the report, it applied 50% to buildings and 40% to land.
5. The current account is already practically liberalised with the lifting of the remaining restrictions on profit repatriation, overseas education and health expenses and travel.
6. In addition to budgetary spending on defence, the Special Funds Law grants the commander-in-chief authority to allocate additional funds for military purposes without parliamentary consent. This possibility not only reduces budgetary transparency and hence accountability, but also reduces the funds available for other areas such as health and education.
7. Two new offshore gas fields are in a production stage, one by Total and another one by a Malaysian company for exports to Thailand. Two other blocks are in an exploration stage (DAEWOO). The royalty is 10%, to be increased to 12.5%, earning USD 2 billion per year. There are several joint ventures where profits are shared between the government (60%) and the company (40%).
8. This is according to the official definition of general government, hence excluding fees for public utilities such as electricity distribution which are still formally part of the state administration and add up to 15% of state revenues.
9. The government is in the process of removing the operation costs and revenues of SOEs from the state account. Since FY 2012-13 the SOEs have their own account system, and 25% of their net profits are taxed. Their privatisation is foreseen in about 3-4 years.
10. A recent study evaluated the energy and environmental performance of eighteen developing countries, including all the Southeast Asian countries, using twenty specific indicators placed Myanmar last or second-to-last in terms of its overall performance and in terms of the amount of improvement that had occurred over 1990-2010 (Sovacool, 2012). While there was some tendency for lower income countries to perform less well than higher income countries in the analysis, Myanmar ranked well below the performance for Lao PDR and Cambodia, and well below that for Viet Nam.
11. Germanwatch, a climate monitoring group, has identified Myanmar as the second most adversely affected country in the world from climate-related severe weather events from 1990-2008 (BEWG, 2011).
12. For example, requiring all factories in a region to lower their pollution emissions below the regulatory maximum by the same amount is inefficient because those that can, because of superior technology or other factors, meet the standard at comparatively low cost are required to cut back no more than those who find it more costly to comply. The same global amount of pollution reduction could be achieved if reductions were concentrated on those factories that could limit their emissions at lowest cost. However this normally cannot be achieved with command instruments since it would require detailed knowledge on factory operating capacities that the authorities setting the standards do not possess.
13. Social enterprises are effectively part non-profit and part commercial entities and as such have distinctive characteristics that need to be accommodated by government policies if they are to thrive (OECD, 2012a).
14. The Councils were originally set up in accordance with the Mandate from the 1992 Rio Summit to establish multi-stakeholder bodies to help in implementing countries' Agenda 21 strategies. As noted earlier, the councils in some cases also play an important role in the co-ordination and integration of environmental policies among government agencies.
15. Until 2004, local authorities responsible for environmental conservation co-ordinated with the local offices of national ministries via committees formed at the local level but had no direct link to the NCEA (Habito and Antonio, 2007).
16. The NECC is also charged with promoting educational programmes in schools and elsewhere to raise awareness of environmental issues and with managing international donations to Myanmar's environmental conservation efforts.
17. In Thailand, waste collection is partially or completely privatised in Chiang Mai, Pattaya and Phuket (APO, 2007).

18. Myanmar has over 30 million labourers (CSO, 2013). According to a survey conducted by JETRO in August 2010, the wage of a factory worker in Myanmar is only 16% of the wage of a Thai counterpart and less than a half of those of Cambodia and Viet Nam (Makishima, 2012).
19. The Corruption Perceptions Index ranks countries based on how corrupt their public sector is perceived by the business community.
20. As of May 2013, the Government, in collaboration with the representatives of the private sector, has been preparing a new SME Development and Promotion Law which formally defines SMEs in Myanmar.
21. The population in 2011 (48.3 million) was used for the calculation (UNESCAP Data Centre at www.unescap.org/stat/data/).
22. The data of state-owned non-manufacturing enterprises in the primary and service sectors are not available.
23. However, it cannot be denied that public sector exports use alternative export vehicles in addition to state-owned enterprises.
24. The State-owned Economic Enterprise Law (1989) is the sole business law to provide a negative list to any private business.
25. Most privatisation of SOEs has been through leasing agreements, typically on 30-year leases, rather than outright sales. However, these deals have not been transparent.
26. The Ministry of National Planning and Economic Development has set up one-stop business support centres in Nay Pyi Taw and Yangon and plans to open another one in Mandalay in 2013. The Government has also planned to set up a number of one-stop service SME supporting centres at the provincial and state levels throughout the country in collaboration with the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI).
27. This trade licensing scheme was overhauled in 2012 by allowing any business establishments or individuals to be able to engage in international trade by introducing streamlined trading procedures (JETRO, 2012).
28. Exporters and importers are included in Myanmar enterprises, foreign enterprises, partnerships or joint ventures.
29. Myanmar has also restricted foreign investment into those sectors (see the Mines Law (1994); the Pearl Law (1995); and other sector development laws for details).
30. In the case of Thailand, such discrimination by nationality has been substantially reduced particularly after the Asian financial crisis in 1997-98.
31. IFC estimates that microfinance has 2.8 million clients in Myanmar (Duflos et al., 2013).
32. The indexes include regulations for business start-ups, dealing with construction permits, employing workers, registering property, accessing credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business.
33. It is envisaged to allocate 5 billion kyats for this purpose and the maximum loan size per SME would be 5 million kyats.
34. The Non-Formal Primary Education (NFPE) Programme was developed in 1998 by the Department of Education Planning and Training (DEPT), the Myanmar Education Research Bureau (MERB) under Ministry of Education (MOE) and the Yangon Institute of Education (YIOE) in collaboration with UNDP and UNESCO. The NFPE system was then tested in two townships. In 2001, NFPE was introduced as a pilot project in 2001 in 11 townships under a UNDP/UNESCO project. In 2012-13, under the sponsorship of the MOE, UNICEF and other donors, 73 townships are providing NFPE Programmes, giving access to education to 10 488 students. UNESCO is currently working with MERB to develop a Non-formal Middle School Equivalency Programme curriculum.
35. The GER is defined as the number of pupils enrolled in primary education expressed as a percentage of the official primary-age population.
36. The transition rate from the primary school level (Grade 5) to the lower secondary school level (Grade 6) was 68.5% before upgrading schools in 2001-02. This transition rate rose to above 80% in 2009-10. Note that only around 35% of those appearing at the matriculation examination at the end of upper secondary school actually pass it.
37. Among others, the government provided financial incentives for teachers to work in rural regions in order to address teacher shortages in those regions. Looking for instance at the ratio of population to lower secondary teacher ratios in rural areas, the initiative seems to be successful: the ratio decreased from 780 to 611 between 1990 and 2010.

38. Among others, this dynamic is driven by the trend of trained teachers not entering the profession. Every year, 8 000-9 000 teachers are trained, but only around 7 500 go into schools.
39. Section 28, Paragraph (c) of the Constitution of the Republic of the Union of Myanmar (2008) states that, "the Union shall implement a free, compulsory primary education system".
40. A student's marks on the matriculation examination at the end of upper secondary school determine if the student is eligible to sit for a particular higher education entrance exam.
41. Tertiary education programmes co-ordinated under other ministries may also have increased. In total, 13 ministries are involved in the educational system.
42. Of the 470 912 students only about 40% were attending regular classes. The remainder were studying via Distance Education. With Distance Education, students take away their coursework and may briefly meet with an instructor to run through the material before exams.
43. Myanmar had technology and science institutes before 1988. During military rule many higher education institutions were closed and gradually reopened during the democratisation process.
44. Besides the Ministry of Science and Technology more than a dozen other ministries are involved in technical and vocational training in a total of 459 public training schools.
45. Note that around 80% of those appearing for vocational training actually pass the final examination.

ANNEX A.2. MYANMAR'S FINANCIAL AND ENTERPRISE SECTORS

Table A.2.1. **Myanmar's financial system**

Type of business organisations	Number of entities	Description	Registration and supervisory office	Legal framework
State-owned development banks	4	Myanmar Foreign Trade Bank Myanmar Economic Bank Myanmar Investment and Commercial Bank (to be renamed the Small and Medium Industrial Development Bank) Myanmar Agriculture and Rural Development Bank	Central Bank of Myanmar and respective line ministries	Central Bank of Myanmar Law (1990); Financial Institutions of Myanmar Law (1990); Saving Bank Law (1992); Myanmar Companies Act (1914)*; Myanmar Agricultural and Rural Development Law (1990)
Private banks	19	Private commercial banks	Central Bank of Myanmar	Central Bank of Myanmar Law (1990); Financial Institutions of Myanmar Law (1990); Saving Bank Law (1992); Myanmar Companies Act (1914)
Financial institutions	5	Myanmar Orient Leasing Company Ltd. Myanmar Insurance Myanmar Securities Exchange Centre Company Co., Ltd. Security and Printing Works Myanmar Microfinance Supervisory Enterprise (former Myanmar Small Loan Enterprise)	Ministry of Finance and Revenue and Ministry of Defence (for security and printing works)	Central Bank of Myanmar Law (1990); Financial Institutions of Myanmar Law (1990); Myanmar Insurance Law (1993); Microfinance Law (2011); Microfinance Notification and Directives (2011); Myanmar Companies Act (1914)*
Representative offices of foreign banks	28	Foreign banks mainly from South-East and North-East Asia	Central Bank of Myanmar	Central Bank of Myanmar Law (1990); Financial Institutions of Myanmar Law (1990); Myanmar Companies Act (1914)*
Micro finance providers	1 755	Microfinance institutions (MFIs) Informal and semi-formal sector Cooperatives NGOs (e.g. PACT) Specialised agricultural development companies Village revolving funds Community-based organisations	Ministry of Finance and Revenue, Ministry of Cooperatives and Ministry of Agriculture and Irrigation	Microfinance Law (2011); Microfinance Notification and Directives (2011); Myanmar Agricultural and Rural Development Law (1990); Cooperative Society Law (1992); Law relating to Forming of Organisations—NGO Law (1988); Myanmar Companies Act (1914)*

Note: * The subsection of the Myanmar Companies Act (1914) covers the provision of bankruptcy; thus, the banking and financial sector has to reply on this law for the cases of loan defaults caused by insolvency.

Sources: PWC (2012), *Myanmar Business Guide*, August 2012, PricewaterhouseCoopers LLP, Singapore, www.pwc.com/sg/en/assets/document/myanmar_business_guide.pdf; Aung, Y. and Khin C. O. (2011), "Small and Medium Enterprises in Myanmar", a presentation at the Asia–Pacific Financial Inclusion Forum, Tokyo, Japan, 6-8 September 2011, Ministry of Finance and Revenue, Government of Myanmar; and Duflos, E. et al. (2013), *Microfinance in Myanmar: Sector Assessment*, January, International Financial Corporation, World Bank Group. Washington, D.C, www.cgap.org/sites/default/files/Microfinance%20in%20Myanmar%20Sector%20Assessment.pdf.

Table A.2.2. **Categories of manufacturers by size in Myanmar, Thailand and Viet Nam**

	Myanmar				Thailand	Viet Nam
Category	**Investment amount**	**Annual production capacity**	**Installed power**	**Number of workers**		
Micro-sized manufacturers	Not applicable	Not applicable	0.25 horse power to 5 horse power	Less than 10	50 or less workers or capital less than THB 50 million (Thai bhat)	1 to 9 workers
Small-sized manufacturers	1 million Kyats	10 million Kyats	Less than 25 horse power	10 to 50		10 to 300 workers; capital less than VND 10 billion (Vietnamese dong)
Medium-sized manufacturers	5 million Kyats	10 million Kyats	Less than 50 horse power	51 to 100	51-200 workers or capital over THB 50 million and less than THB 200 million	
Large-sized manufacturers	10 million Kyats	More than 10 million Kyats	Over 50 horse power	Over 100	Over 200 employees or capital over THB 200 million	Over 300 workers; capital over VND 10 billion

Source: Ministry of Cooperatives (2013), *Types of Industries in Myanmar*, in the Small Scale Industries Department of the Ministry of Cooperatives, Yangon, 16 January 2013 and UNESCAP (2012a), *Policy Guidebook for SME Development in Asia and the Pacific*, United Nations Economic and Social Council for Asia and the Pacific, Bangkok, www.unescap.org/tid/publication/indpub2621.pdf.

Table A.2.3 **State-owned enterprises by business fields: Profit and loss**

Business fields	1990-91	1995-96	2000-01	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Accumulated profit or loss (2004-11)
AGRICULTURE AND FOREST	-951	-3 238	-45 786	-42 782	-34 517	-72 367	-86 128	-110 932	-116 924	-116 669	-580 319
1.Agricultural enterprises	-720	-2 443	-35 608	-14 795	-13 976	-24 777	-22 105	-27 206	-14 145	-29 433	-146 437
2.Myanma timber enterprise	-231	-794	-10 178	-27 988	-20 541	-47 589	-64 023	-83 726	-102 779	-87 236	-433 882
LIVESTOCK BREEDING AND FISHERIES	27	-120	8	-5 096	-2 023	-3 326	-16 151	-8 347	-7 383	-18 464	-60 789
1.Myanma fisheries enterprise	49										0
2.Livestock, foodstuff and milk products enterprise	-22	-120	8	-5 096	-2 023	-3 326	-16 151	-8 347	-7 383	-18 464	-60 789
MINES	-345	-236	1 152	-1 328	8 263	-1 275	12 067	18 832	3 648	30 912	71 118
1.Mining enterprises	-290	-672	-1 021	-1 644	-1 751	-5 333	-3 432	-4 190	-2 886	3 314	-15 922
2.Myanma gems enterprise	-66	452	2 340	337	10 104	3 571	15 425	23 998	7 665	28 108	89 207
3.Myanma salt and marine chemical enterprise	6	-7	-101	-208	-184	-95	-56	-356	-460	-477	-1 835
4.Myanma pearl enterprise	4	-10	-66	187	94	582	130	-620	-671	-33	-332
INDUSTRY	633	-216	1 365	-2 042	8 829	10 372	-805	7 565	-9 685	-9 057	5 177
1.Industry (1)	431	-714	1 108	630	14 023	10 802	6 258	4 898	-18 837	-23 369	-5 595
2.Industry (2)	202	497	257	-2 671	-5 194	-430	-7 063	2 667	9 152	14 312	10 772
ENERGY	29	2 265	-9 766	-26 026	-150 304	-121 264	-127 668	-76 773	-89 867	99 700	-492 203
1.Myanma oil and gas enterprise	7	-14	-1 310	-992	-1 078	-17 248	10 262	-3 770	6 786	-10 001	-16 040
2.Myanma petrochemical enterprise	-54	2 176	-3 221	-13 817	-114 098	-54 521	-63 727	-3 765	-51 206	-48 040	-349 173
3.Myanma petroleum products enterprise	-62	-69	-990	-7 781	-32 207	-82 321	-100 456	-68 950	43 751	212 872	-35 094
4.Myanma electric power enterprise	137	171	-4 245	-3 437	-2 921	32 826	26 253	-287	-89 198	-55 132	-91 896
PUBLIC WORKS	-155	39	-7 976	-757	10 155	4 023	5 979	2 440	9 352	7 784	38 976
TRANSPORT	213	356	224	-545	-1 812	-11 294	-8 515	-11 146	-8 242	-5 238	-46 792
1.Myanma five star line	51	16	-129	588	436	2 687	200	-604	-6	-469	2 831
2.Inland water transport	40	119	4	1 569	227	-2 785	-3 324	-4 690	-4 781	-4 651	-18 435
3.Myanma port authority	82	330	184	284	46	-1 838	-1 734	-2 411	-1 881	-2 765	-10 299
4.Myanma shipyards	26	-21	-75	-212	-255	-543	-943	1 056	-491	-739	-2 128
5.Myanma airways	19	24	241	-924	-1 693	-2 845	-1 602	-3 449	-903	2 813	-8 603

Table A.2.3. **State-owned enterprises by business fields: Profit and loss** *(cont.)*

Business fields	1990-91	1995-96	2000-01	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	Accumulated profit or loss (2004-11)
RAIL TRANSPORT	212	197	-377	-4 633	2 585	-9 733	-18 262	-21 445	-20 376	-26 265	-98 129
1.Myanma railways	137	408	289	4 674	1 252	-12 530	-16 401	-24 503	-28 791	-33 218	-109 517
2.Road transport	40	140	49	402	394	33	-207	44	-1 811	-1 464	-2 609
TELECOMMUNICATIONS, POST & TELEGRAPH	128	307	745	-33 080	39 022	17 287	65 923	23 500	32 167	57 196	202 016
1.Myanma post and telecommunications	128	307	745	-33 080	39 022	17 287	65 923	23 500	32 167	57 196	202 016
FINANCE AND REVENUE	653	1 203	3 665	20 547	12 177	15 814	8 293	16 248	39 035	31 234	143 348
1.Central Bank of Myanmar	279	603	3 753	16 333	3 158	21 644	31 571	28 943	44 387	36 511	182 546
2.Myanma economic bank	225	-169	-1 372	9	3 116	-9 988	-28 523	-23 154	-11 489	-14 184	-84 212
3.Myanma foreign trade bank	87	73	39	136	196	225	377	79	112	71	1 196
4.Myanma agricultural and rural development bank	25	130									0
5.Myanma investment and commercial bank	6	97	101	90	164	27	59	504	1	-772	72
6.Myanma insurance	153	507	843	3 498	4 160	3 465	4 131	9 971	6 832	11 523	43 580
7.Security and printing works	-122	-64	265	-337	510	-561	139	255	-1 079	-1 636	-2 708
8.Myanma small loan		27	37	819	874	1 003	538	-350	271	-280	2 874
TRADE ENTERPRISES	-1 381	-4 925	-49 011	-5 173	896	-1 334	-1 007	-815	-1 594	-1 059	-10 084
SOCIAL SERVICE	47	-70	-52	268	2 787	1 468	2 516	1 161	509	500	9 208
1.Information	45	-55	1	164	2 357	739	1 953	1 719	263	-5	7 190
2. Social Security Board.	2	-15	-53	104	430	729	563	-558	246	504	2 018
GRAND TOTAL	**-276**	**-3 528**	**-153 914**	**-187 303**	**-223 460**	**-346 204**	**-333 854**	**-332 985**	**-363 356**	**73 907**	**-1 713 255**

Source: The authors' compliance based on CSO (Central Statistical Organization) (2013), *Myanmar Data: CD-ROM 2011-12*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar.

Table A.2.4. **Incentives and restrictions relating to business investments in Myanmar**

	Myanmar Companies Act (1914)	State-owned Economic Enterprise Law (1989)	Foreign Investment Law (1988)	Foreign Investment Law (2012)	Myanmar Citizens Investment Law (1994)	Special Economic Zone Law (2011) and Dawei Special Economic Zone Law (2011)[1]
Regulated business	Local and foreign business	State-owned business	Foreign business, including joint ventures, partnerships and branches/ subsidiaries	Foreign business, including joint ventures, partnerships and branches/subsidiaries	Local business	All business and nationalities, including foreign insurance companies
Supervising ministry	Ministry of National Planning and Economic Development	Various line ministries	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development	Ministry of National Planning and Economic Development	Special Economic Zone Central Committee
Foreign ownership	Not applicable	Not allowed	100%	100% (no share holding limitation for joint ventures except some business activities)	Not allowed, including partial shareholding or control by foreigners	100%
Land ownership by foreigners	No	Not applicable	No (leasing only from the government up to 40 years)	No (leasing from both the government and citizens up to 60 years)	Not applicable	No (leasing from both the government and citizens up to 75 years for large enterprises); right to transfer the leasing agreement to the third party under the Dawei Special Economic Zone Law (2011).
International trade	Only domestic companies	Yes	Yes	Yes	Yes	Yes
Trade-related performance or local content requirement[2]	No	No	No (but declaration required on the percentage of goods export and domestic sales)	No (but local content requirements only for a limited number of manufacturing activities)	No	No (but there are tax based incentive or export).
Labour hiring[3]	No foreigners as director	No	No	Nationality requirements for both unskilled and skilled workers[4]	No limitation but requiring approval for foreign workers	Nationality requirements for both unskilled and skilled workers[5]
Nationalisation	Yes	Not applicable	No	No	No	No
Tax holiday	No	Not applicable	First three years and various additional tax exemptions and reliefs	First five years and various additional tax exemptions and reliefs	First three years and various additional tax exemptions and reliefs[6]	First five years and various additional tax and duty exemptions and reliefs; exemption of customs duty at export processing zones
Corporate tax[7] (as of 2012)	Up to 25%	Up to 25%	Up to 25%	Up to 25%	Up to 25%	Up to 25%

Table A.2.4. **Incentives and restrictions relating to business investments in Myanmar** (*cont.*)

	Myanmar Companies Act (1914)	State-owned Economic Enterprise Law (1989)	Foreign Investment Law (1988)	Foreign Investment Law (2012)	Myanmar Citizens Investment Law (1994)	Special Economic Zone Law (2011) and Dawei Special Economic Zone Law (2011)[1]
Repatriation of profits	Not applicable	Not applicable	Yes	Yes	Not applicable	Yes
Negative list for private business	No	Negative list (i.e. teak; forest plantation; oil and natural gas; pearl, jade, precious stones; certain breeding and production of prawns and fishes; postal and telecommunications; air and railway transport services; banking and insurance services;[8] broadcasting and television services; metal mining; electricity generation;[9] and security and defence related manufacturing).	Positive list (i.e. agriculture and irrigation, livestock and fishery, forestry, limited mining, power, manufacturing, construction, transport, hotels and tourism); no service sector; and joint ventures or partnerships with state-owned enterprises.	Negative list: a) 21 prohibited activities, e.g. arms and ammunitions, polluted activities, ozone depletion chemicals, hazardous materials, natural forest, some mining, utilities, air navigation, and mass media in local language; b) 42 activities allowed only in the form of joint venture, e.g. food and beverage, light manufacturing, real estate, mining, construction, passenger and cargo transport and logistics, healthcare, tourism; c) 115 activities required line ministries' recommendations; d) 27 activities permitted with conditions; and e) 32 activities required Environmental Impact Assessment.	Positive list (i.e. agriculture, livestock and fishery, forestry, mining, manufacturing, and services); and joint ventures or partnerships with state-owned enterprises.	Positive list (i.e. port management, manufacturing - particularly high technology industries, electricity generation and distribution, logistics and transport services, infrastructure construction, oil and natural gas distribution and pipeline construction, agro business, livestock and fishery, forest products, limited trading, hotels and tourism, education and healthcare, and real estate); and joint ventures or partnerships with state-owned enterprises.

Notes:
1. The rules and regulations of both the Special Economic Zone Law (2011) and the Dawei Special Economic Zone Law (2011) have yet to be specified. The SEZ Laws contain different incentive schedules based on the size of enterprises (i.e. large-scale investment, medium-scale investment and small-scale investment), which favour large enterprises.
2. Some neighbouring countries of Myanmar, such as Indonesia, Malaysia and Thailand, maintain local content, export performance and domestic sales requirements for foreign investments in certain sectors, including various manufacturing industries such as motor vehicles and electrical goods, although these countries are under pressure to liberalise. The WTO TRIMS Agreement generally prohibits trade-related investment measures (Myanmar is a founding member of WTO).
3. Most other ASEAN countries have no restriction on foreign workers. However, Lao PDR allows foreign workers to a maximum of 10% of the total labour force of a foreign enterprise, whereas in Cambodia the total number of foreign workers is determined by the Government on a case-by-case basis.
4. The new FDI law (2012) requires that all unskilled workers must be Myanmar workers. After five years, 25% of the skilled workforce in foreign companies must be Myanmar, increasing to 50% after the next five years, then 75% after 15 years.
5. The two SEZ Laws (2011) also require that all unskilled workers must be Myanmar workers. After five years, 25% of the skilled workforce in foreign companies must be Myanmar, increasing to 50% after the next five years, then 75% after 15 years.
6. According to the Ministry of National Planning and Economic Development, the Myanmar Citizens Investment Law (1994) will be revised to provide the same incentives as those of the new Foreign Investment Law (2012).
7. Myanmar's corporate tax rate (25%) is relatively high compared with those of neighbouring countries. Their specific rates are: 20% for Thailand (from 2013); 20% for Cambodia; 17% for Singapore; 25% for Indonesia; 20% for Lao PDR; and 25% for Viet Nam. Those rates are the maximum applicable rates and may change by sector (e.g. natural resources and high tech industry) and by zone (e.g. rural versus urban, special economic zones, etc.).
8. The present Government has opened the banking sector to the private sector and planned to open to foreign banks after 2015. The Government has also worked to open the insurance sector.
9. Other than those permitted by law for private and co-operative electricity generation (PWC, 2012).
Source: Authors' compilation based on Myanmar's laws mentioned in the first row of the table.

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Chapter 3

For more inclusive growth and equitable opportunities

The following chapter examines the policy challenges facing Myanmar in achieving growth that is more inclusive and which provides more equitable opportunities than it has in the past. The first section examines Myanmar's recent growth performance in order to highlight which groups in society have benefited and which have been excluded, looking at levels of poverty and inequality and sources of growth. The discussion then turns to people's access to public services and goods, looking at differences in access between poor and non-poor households, between rural and urban areas, across different states and regions, and along gender lines. Equality between ethnic groups is also discussed in the context of building a multi-ethnic state. The chapter ends by assessing the state of trust in Myanmar's institutions, looking primarily at trust in public institutions, and suggesting ways to build this component of social capital.

Ensuring that growth is inclusive and provides equitable opportunities is a prerequisite for Myanmar's sustainable development. Growth that lacks inclusiveness or sufficient equity in opportunities impairs the social consensus and communication between government and its citizens that is essential to the pursuit of effective development policies, which often require difficult trade-offs that must be understood by the public if they are to be acceptable and successful. OECD work on inclusive growth stresses the importance of taking a multi-dimensional understanding of well-being where the distribution of outcomes matters, and where the active participation of individuals and households is key.

Inclusiveness means that all elements of society - individuals, ethnic groups, businesses and civil society - are able to participate in the decisions that affect their lives, including the choice of government policies. Equitable development can be fostered by creating the conditions for all people to be able to be healthy, well-nourished and educated and to participate in public life. Adequate access to public services by all segments of the population is essential to the creation of equitable opportunities as well as to the provision of conditions in which people are able to lead full lives and enjoy well-being. As with stable and sustainable development, achievement of inclusive and equitable development requires the accumulation of adequate human and physical capital and, especially, institutional and social capital.

This chapter examines the policy challenges facing Myanmar in achieving growth that is more inclusive and provides more equitable opportunities that it has in the past. The first section focuses on the importance of making growth more broad-based to create more equal opportunities. It examines Myanmar's recent growth performance in order to highlight which groups in society have benefited and which have been excluded. The second section examines people's access to public services and goods in Myanmar, looking at differences in access between poor and non-poor households, between rural and urban areas, across the country's states and regions, and along gender lines. The diagnosis focuses in particular on access to healthcare and education and essential infrastructure including electricity, safe water and sanitation and roads. The third section then examines what is perhaps the most difficult requirement for achieving inclusion in Myanmar's development – the building of a multi-ethnic nation state. The final section assesses the state of trust in Myanmar's institutions, looking primarily at trust in public institutions. Trust, a key dimension of social capital, is fundamental for an inclusive development process as the level of trust in government will affect people's willingness to take part in co-operative action and accept policy reforms. Transparency and accountability are essential elements in trust-building.

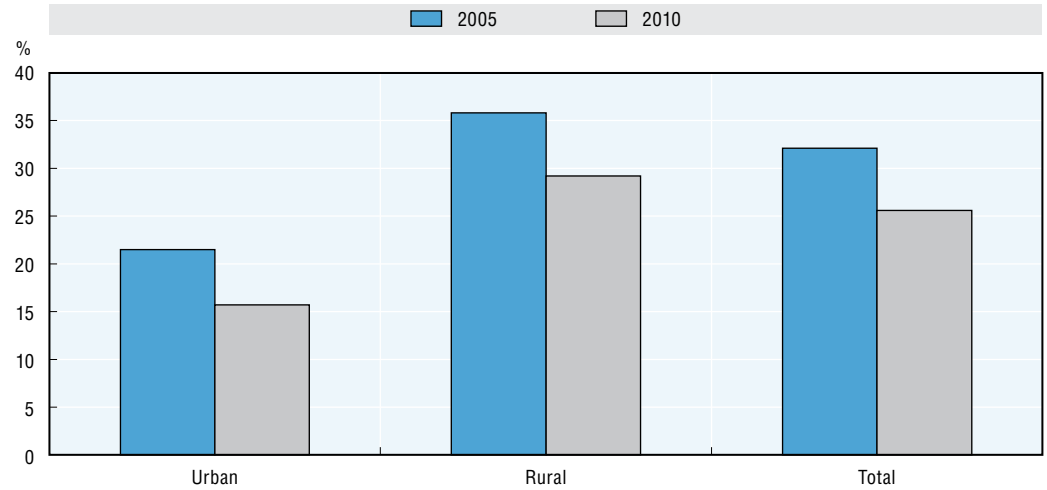
Making growth more broad based to create more equitable opportunities

Widely shared growth and the creation of new employment opportunities through structural change are needed to reduce poverty rates. Myanmar's economic growth has been moderate in recent years and has excluded many, having less of an effect on poverty than in other Asian economies. Growth could provide more equitable opportunities, as Myanmar has very high poverty rates. Applying a measure of absolute poverty based on minimum food expenditures and reasonable non-food expenditures, about a quarter of the population still lives in poverty (Figure 3.1).[1]

Inequality in Myanmar is also high, though gradually improving. Due to a lack of household income data, measurements of inequality and poverty in Myanmar must be

based on household consumption, defined as cash purchases of goods. Between 2005 and 2010, the share of total consumption by the poorest quintile (20%) of the population increased from 11% to 12%. The gap in consumption between the richest and the poorest quintiles also declined by 8% over this period, though by more in urban than rural areas (12% and 7% declines, respectively) (UNDP, 2011a). The Gini coefficient for household consumption was 0.38 in 2009-10.

Figure 3.1. **High but decreasing poverty rates between 2005 and 2010**



Note: Poor households are defined as households that fall below the poverty line, which is based on two criteria. First, minimum food expenditures to satisfy caloric requirements; second, reasonable non-food expenditure to meet basic needs.

Source: UNDP (2011a), *Integrated Household Living Conditions Survey in Myanmar (2009-2010): Poverty Dynamics*, United Nations Development Programme.

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Economic growth that benefits low-income households is required for a country to reduce poverty. At the same time, sustained growth may be hampered by poverty and inequality, which reduces social consensus behind government policies and potentially increases political instability, in addition to limiting the potential contributions of the poor to national saving and human capital accumulation. To be stable and sustainable, development also needs to be broad based in the sense of being spread across a country's regions and sectors and the benefits shared by as much of the population as possible. Broad-based growth requires the expansion of employment (including self-employment), as well as productivity increases across all sectors, particularly in sectors where the poor are concentrated. The poor and disadvantaged also need access to resources, such as finance and training, which will allow them to benefit from these opportunities.

Recent reforms in Myanmar, such as establishing the rule of law, improving regulations on business, improving governance, and reform of the exchange rate system, as well as the easing of international sanctions, are helping to establish the conditions needed to support future broad-based growth.

Creation of more equitable opportunities depends on development of manufacturing and services

Most of Myanmar's output and exports still come from the primary sector. Industries in this sector are dominated by public sector firms and tend to create few jobs and

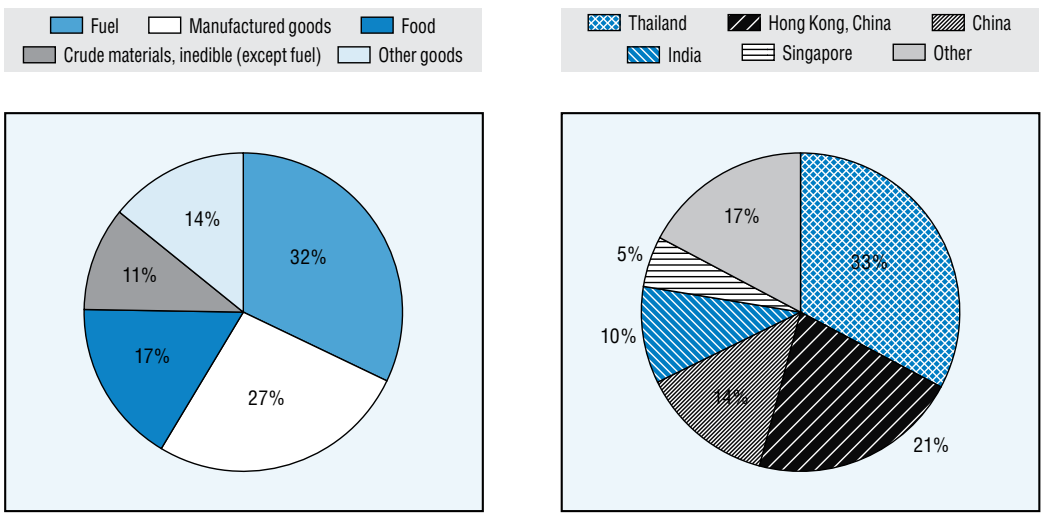
provide little income for workers. Agriculture remains a very large part of Myanmar's economy, and its low productivity is a major factor behind the high level of poverty. The sector employs about 70% of the population, but only accounts for about 50% of its output. Improved productivity in agriculture is needed to raise rural incomes and to free surplus labour to find work in other sectors.

However, manufactured goods have made a much larger contribution to GDP in recent years. This trend supports broad-based growth, as manufacturing industries tend to grow along with improvement in employment and productivity. The continued shift in employment away from farming and toward more productive manufacturing activities will improve overall productivity and help to reduce poverty. The improvements in agricultural and manufacturing productivity that will support this transition require investment, improved access to inputs, effective infrastructure, and reduced regulatory barriers to domestic and international trade. This process should also lead to large-scale formalisation of employment, as by definition most farmers are counted as informal workers, provided that the formal private sector is successfully developed. Currently, it is mainly employees in the government or public sector that can be categorised as formal employees.

The services sector remains small, accounting for around 16% of output, most of which is in the transportation industry, but is growing faster than the economy as a whole. Openness to foreign investment and the plethora of recently adopted reforms should improve the size and diversity of the services sector and provide higher-paying job opportunities compared to agriculture.

Figure 3.2. **Exports need to be more diversified**

Exports by sector and destination, 2010-11



Source: CSO (2012), *Myanmar Statistical Yearbook 2011*, Central Statistical Organization, Ministry of National Planning and Economic Development, Nay Pyi Taw, Myanmar.

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Domestic inefficiencies and international trade and investment sanctions leave Myanmar dependent on a narrow range of export goods and partners. Trade in energy with Thailand and China accounts for a significant share of exports (Figure 3.2). Before the United States imposed trade sanctions, it was one of the biggest importers of goods from Myanmar, largely due to trade in garments. This sector has since declined in importance; its share in the total value of exports has declined from 30% in 2000-01 to 4% in 2010-11. Development of a broader-based export sector based on Myanmar's abundant labour and other comparative advantages will help to facilitate the shift of labour into higher-productivity jobs and to reduce fluctuations in employment and income by fostering more stable growth.

Disparities in infrastructure and access to resources contribute to regional and rural-urban inequalities

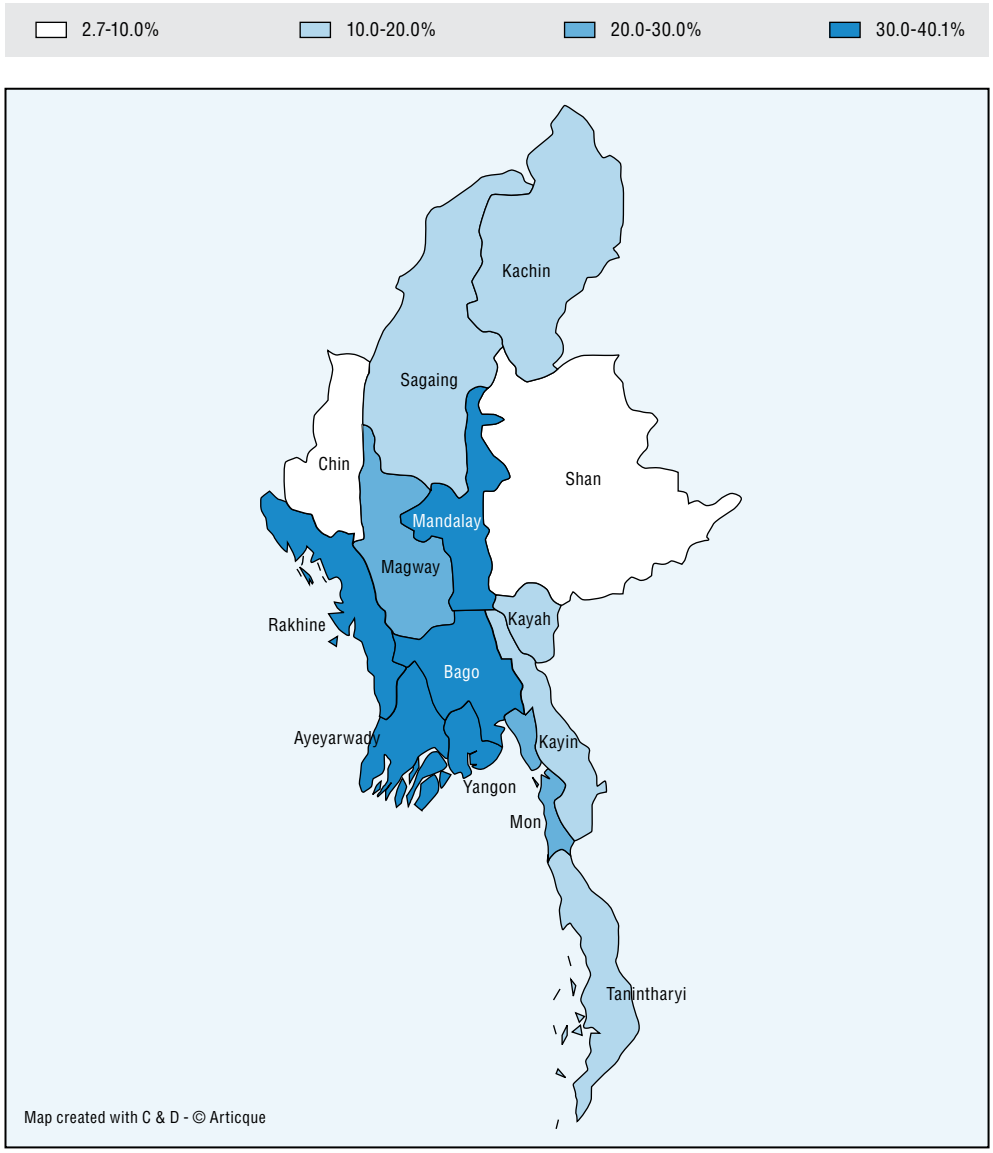
There are large disparities in income levels and poverty incidence across regions in Myanmar and between rural and urban areas. Poverty rates vary widely across the country, from 11.4% in Kayah State to 73.3% in Chin State. Rural areas generally face higher poverty and have fewer opportunities (UNDP, 2011a). Agriculture is the main source of employment for most rural residents of Myanmar, but its low productivity means that these workers tend to receive low incomes.

Disparities in human, physical, and institutional capital are behind much of the income and poverty inequalities across areas. For example, the rural landless in particular face very serious challenges. In a survey conducted in 2010, 26% of rural households with members working in the agriculture, hunting and forestry sector did not report having a right to use any land of their own. The picture is mixed across the countries states and regions (Figure 3.3). The Administration of Vacant, Fallow and Virgin Lands Law of 2012 established the legal framework for distributing unused lands among the landless, though it will remain to be seen how effective it is in practice. While in the short term it may boost incomes of the targeted households, over the long term, the number of landless households in rural areas is expected to decline as agricultural productivity and rural-urban migration increase. People with the fewest opportunities in small communities need to be encouraged to seek opportunities in cities.

Infrastructure is less-developed in Myanmar than in neighbouring countries, increasing transportation and transaction costs, particularly in under-served rural areas. Road and rail networks are under-developed and only 13% of the population – the majority in urban areas – has access to electricity. Communications networks face similar limitations. While improvements have been made, Myanmar still has the fewest mobile phone subscribers for its population in Southeast Asia, and the second-lowest number of telephone lines and internet users per capita, ahead of only Timor-Leste (World Bank, 2013). Again, this infrastructure is much scarcer in rural than in urban areas and its availability varies considerably among regions.

Figure 3.3 **Landlessness is a serious problem**

Percentage of households working in agriculture that reported no land holding



Source: Authors' calculations based on UNDP (2010), *Integrated Household Living Condition Survey in Myanmar*, United Nations Development Programme.

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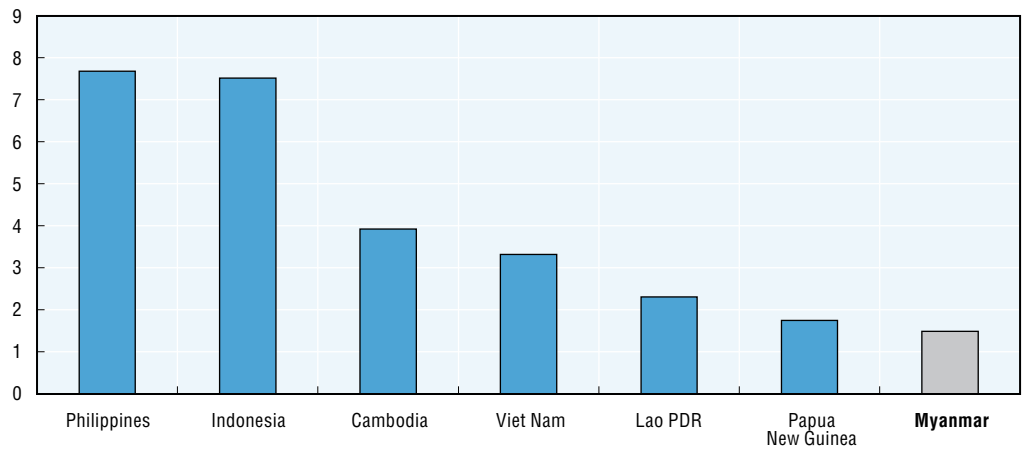
Interestingly, the periphery is relatively wealthier, showing the highest rates of household expenditure per capita in the regions bordering Thailand, China and Bangladesh. Businesses in these areas take advantage of lower transportation costs in neighbouring countries and workers cross borders temporarily to find work at higher wages (Kudo, 2007). The government's plans to establish special economic zones (SEZs) may help to create jobs and keep workers from leaving the country, but could also continue to create isolated regions of growth rather than widely-shared development.

Insufficient access to credit, particularly in rural areas, holds back investments and helps to perpetuate poverty. The formal banking sector does not reach most of the population and there are low levels of both formal and informal lending in Myanmar (Figure 3.4). Much of the available credit is directed to state-owned businesses instead of the private sector. The underdevelopment of the traditional financial sector is partly addressed by a growing number of public, co-operative, and NGO-run microfinance institutions, which together reach an estimated 2.8 million borrowers in Myanmar (Duflos et al., 2013). The Microfinance Law, passed in 2011, and a new regulatory system for the sector are expected to help support the further development of the sector.

Figure 3.4. **Few people have access to banking services**

Commercial bank branches per 100 000 adults, 2009



Source: World Bank (2013), *World Development Indicators* (database), http://databank.worldbank.org.

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More equal development of the regions has often been stated as a policy objective by the current and previous governments and efforts have been made to foster equitable development between the states and regions. For example, industrial zones with their associated technical colleges have been established in every state and region in order to give an impetus to local industrial development and job creation. Regional development will be an important tool in overall poverty reduction in the country. Beyond this, regional equality is an especially important policy objective for a country such as Myanmar, as regional inequality affects the risk of secessionist conflict. In highly unequal federations, both relatively developed and underdeveloped regions are more likely to be involved in secessionist conflict than regions close to the country average (Deiwicks, Cederman and Gleditsch, 2012). Given the history of ethnic conflict in the country, and the peace processes underway, continued uneven regional development could undermine the efforts for peace in the long term.

Myanmar's natural environment, including its topography and climate, can have an important bearing on the suitability and productivity of land for agriculture. This is particularly important when considering inequalities between regions in Myanmar given that the majority of the population depend on agriculture for their livelihoods. Away from the fertile lands of the delta region, conditions for agriculture are more challenging in some regions, particularly in the Dry Zone and upland areas.

The Dry Zone in central Myanmar (which covers the states of Magway, Mandalay and lower Sagaing) receives very little annual rainfall and suffers from poor and shallow soils, resulting in low agricultural yields. The little rainfall it does receive generally comes in the form of intense rains in the monsoon period, leading to further degradation of the land through soil erosion. Droughts are a common occurrence. This year, low water levels and unusual rainfall patterns have led to concerns that water shortages will be more acute this year than past years. In Yenangyaung, Mandalay Division, 20% of farmers experienced winter crop failures due to lack of rains (WFP, 2013). The challenges posed by the natural conditions are compounded by a lack of institutional support and service provision by the government.

The mountainous areas in northern Myanmar, such as Chin state, also face challenging conditions for agriculture. In Chin, just 3% of the land is cultivated, compared to a national average of 18% (CSO and Department of Agricultural Planning, 2011). Poverty in Chin state is particularly acute: 73% of the population live below the poverty line compared to the national average of 25%. Slash-and-burn cultivation, which is widely practiced in Chin state, leads to a degradation of land and leaves little room for cultivating the plots left behind. Chin state is also susceptible to a natural phenomenon which can have a serious impact on food production and hence food security and to which no adequate solution has been found: rat infestations (Box 3.1).

Box 3.1. **The rat infestation problem in Chin state**

Rat infestations occur on a roughly 50-year cycle, triggered by mautam, the flowering of bamboo (bamboo covers a fifth of the area in Chin State). The bamboo flowers provide a source of food for the rats, leading to a population explosion. The rats then feed on villages' crops and food stores, devastating the food supply. The negative consequences of mautam can endure long after the infestation is over. Once the bamboo has flowered, the plant dies and the roots which bind the soil together start to decompose, leading to soil degradation that is only worsened by cultivation. Chin state is still recovering from the last occurrence of mautam in 2008.

The endowment of natural resources also varies between states/regions, providing a potential source of inequality. Upland areas such as Kachin State are suitable for hydropower and potential exists beyond the current installed capacity. Minerals, another important source of wealth in Myanmar, are concentrated in the central/northern states. For example, gem-quality semiprecious stones are mined in six areas of the country: Hpakant, Moe-Nyin, and Namya in Kachin State, Khamti in Sagaing Division, Mogok in Mandalay Division, and Mongshu in Shan State; copper is mined in Monywa, Sagaing Division; coal in Kalewa, Sagaing; and nickel in Thabeikying, Mandalay Division (Fong Sam, 2011).

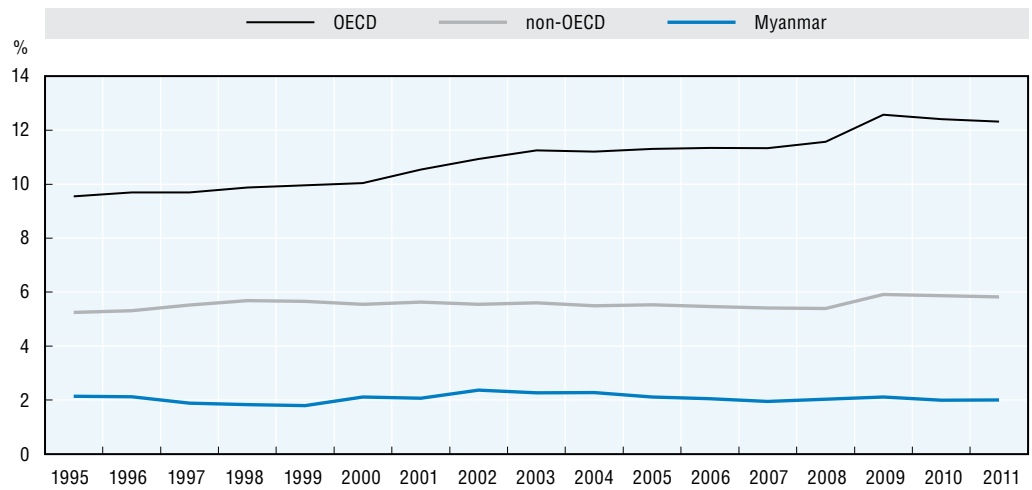
Social policies are central to ensuring that opportunities are more broadly shared

In addition to investing in infrastructure and reducing regulatory inefficiencies, greater education and health spending will help support broad-based growth that provides more equitable opportunities. Improvements in human capital are needed to build a labour force with the skills needed to fill positions in more productive industries as they grow. As discussed in Chapter 2, public spending on education and educational attainment in Myanmar has been low in comparison with its peers. Human capital is also determined by workers' health, which affects their productivity. Poverty and low government spending

are responsible for low life expectancies and other poor health outcomes in Myanmar. Although most indicators are improving, they are low compared with those in other developing countries in the region. Life expectancy at birth was 64 in 2011, one of the lowest in the region (only Cambodia, where life expectancy in 2011 was 63, was lower). A maternal mortality rate of 200 per 100 000 live births puts Myanmar on a par with countries such as India (200) and Indonesia (220) but worse than neighbouring Thailand (48), Viet Nam (59) and the Philippines (99). Total public and private investment in health remains at less than half the average of other developing countries in the region (Figure 3.5).

Figure 3.5. **Health spending is low in Myanmar**

Total health expenditure as percentage of GDP, 1995-2011



Note: Total health expenditure includes public and private health-related spending.

Source: Authors' calculations based on World Bank (2013), *World Development Indicators* (database), http://databank.worldbank.org.

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The public provision of basic social protection can help protect vulnerable groups from unexpected shocks and protects investments in human capital. Myanmar's government presently offers only limited and uneven assistance along these lines (Nishino and Koehler, 2011). Social safety nets are particularly important in Myanmar, a country with high levels of transitory poverty (where people move in and out of poverty) which is estimated to affect up to three times as many households as chronic poverty, and where the underdeveloped financial sector provides little opportunity for smoothing income fluctuations (UNDP, 2011a). Currently only about 600 000 people (1% of the population largely civil servants and public sector employees), are covered by social security. The new Social Security Law, passed in 2012 to come into force in 2013, aims to increase coverage to about 10 million people, including formal and informal workers.

Ensuring equal access to public services and goods

Poverty is a major barrier and source of inequality in access to public services and goods such as education, healthcare and key infrastructure that will play a crucial role in improving living standards. Access to public services and infrastructure is also generally less for rural compared to urban residents, and for residents of some states/regions compared to others. Differences in access appears to be relatively less pronounced along gender lines, although years of low spending on healthcare is likely to have had a larger

adverse impact on women than on men. The government is planning to increase public investment in service delivery as well as spending on rural roads, electrification, health and education.[2] The allocation of these additional resources needs to be wisely targeted to reduce rather than amplify the existing inequalities in access to public services and goods.

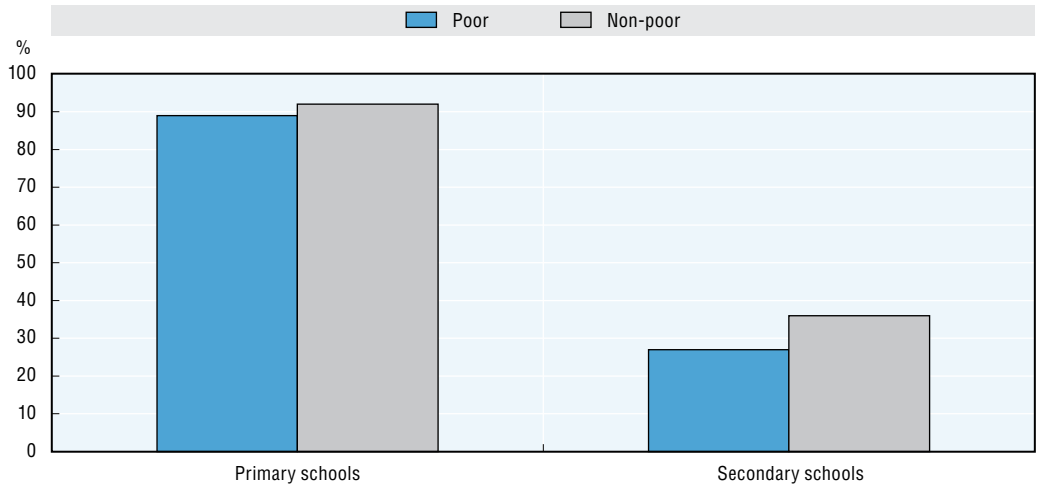
Poverty is a barrier to access, particularly for education

The cost of public services may make them unattainable for poorer people in Myanmar. Although some public services such as primary education are nominally free, other expenses and opportunity costs related to the services may push them out of reach for poorer people. This is most evident in people's access to education. School enrolment rates[3] vary widely between poor and non-poor households: poor households' primary enrolment rates are 9 percentage points lower than non-poor households[4] and secondary enrolment rates are 24 percentage points lower (although secondary enrolment rates among the poor did increase significantly between 2005 and 2010).[5] This is because children from poor households are often relied upon to contribute to the work of the family either directly, such as by providing agricultural labour, or indirectly through domestic work or the care of siblings. As a result, children from poor households are less likely to be in school and more likely to be working than children from non-poor households: 18% of children aged 10-14 from poor households work, compared to 10% for children from non-poor households.

The cost of getting an education rather than the physical distance to schools appears to be the major barrier to access to primary education for poorer households in Myanmar (Figure 3.6). For secondary education, physical access to schools is a barrier for both poor and non-poor households, in addition to the cost barrier for poor households. Between one million and two million children in Myanmar are estimated to not be in school or other education facility due to economic hardship.[6] Inadequate public investment in education has meant that the financial burden of schooling has fallen on parents. As well as school fees, parents often need to pay fees for registration and exams as well as cover additional costs such as books and learning equipment.

Figure 3.6. **Physical access to secondary education is low across all households**

Physical access to education, 2009-10



Note: Physical access is defined as those living within a one hour walk (1.23 miles) of the school in question.

Source: UNDP (2011b), *Integrated Household Living Conditions Survey in Myanmar (2009-2010): Poverty Profile*, United Nations Development Programme.

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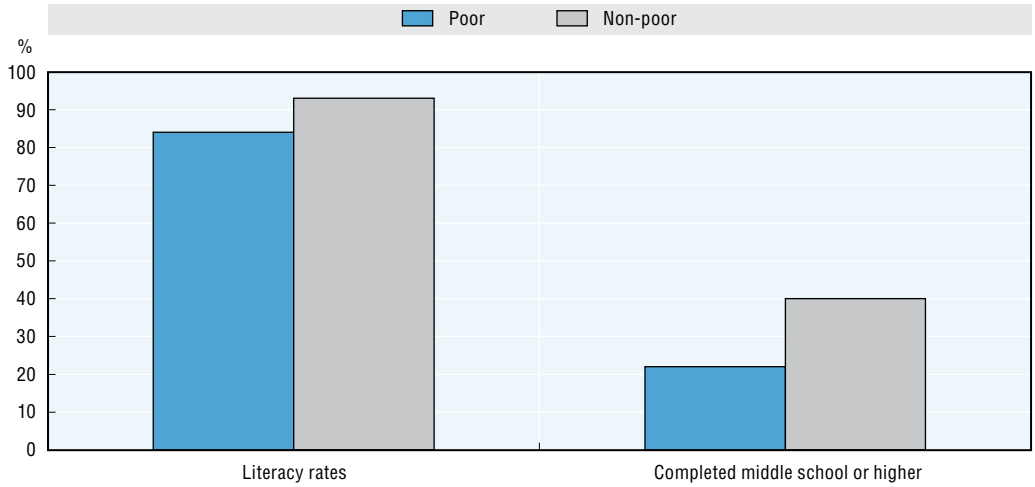
Monastic schools are an alternative to government schools for poorer students seeking a basic education, but these schools can only go so far in addressing the access gap. In 2010, 13.3% of poor household heads reported that monastic education was the highest level of education they had received, compared to 8.4% for non-poor household heads. While students from a range of backgrounds can attend monastic schools, they are a particularly attractive alternative for poorer students as they do not charge fees and there are no additional costs. The quality of monastic education is also generally considered to be good. However, their coverage is limited: in 2010-11, pupils at monastic schools accounted for just 3.4% of the total number of pupils in primary school, 1.6% in middle school and 0.4% in high school.

The differences in access to education are reflected in the lower education attainment of poor households compared to non-poor households in both literacy rates and level of schooling completed (Figure 3.7).

Figure 3.7. **Poor households have lower educational attainment**

Literacy rates and middle school completion rates, 2009-10



Note: Middle school refers to lower secondary school.

Source: UNDP (2011b), *Integrated Household Living Conditions Survey in Myanmar (2009-2010): Poverty Profile*, United Nations Development Programme.

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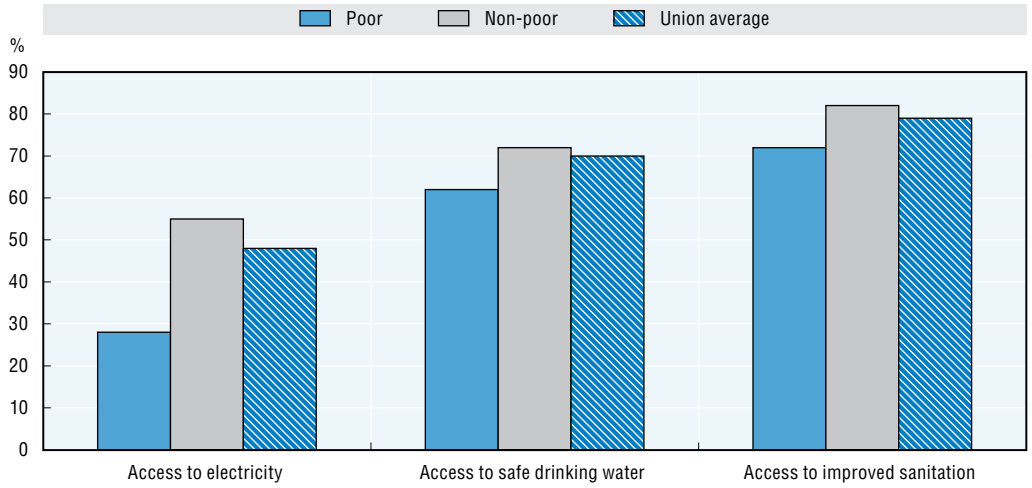
Poverty seems to have a relatively less important bearing on physical access to healthcare,[7] and in an encouraging trend, poor households' physical access to healthcare has been rising over the years: between 2005 and 2010, access rose from 57% to 77%. However, non-poor households spend three times more on healthcare than poor households, indicating that some healthcare services and medical treatments may be out of the financial reach of the poor as there is no universal provision of basic healthcare. Poor households show lower rates of access to services such as skilled persons attending births, antenatal services and immunisations, possibly because the cost of these services may be prohibitive. Given the lack of universal health care and the low social security coverage,[8] the private sector provides the majority of health care services, particularly for the poor. This private sector is largely unregulated and staff may even be untrained, raising concerns about the low-quality of the treatment and the vulnerability of users, particularly poor households, to financial exploitation (Ministry of National Planning and Economic Development and UNICEF, 2012).

Poor people's access to key infrastructure such as safe drinking water,[9] improved sanitation[10] and electricity increased between 2005 and 2010, but large gaps still remain (Figure 3.8). The gaps in access to electricity are particularly stark.

Figure 3.8. **Poor households have lower access to key infrastructure**

Access to electricity, drinking water and improved sanitation, 2009-10



Source: UNDP (2011b), *Integrated Household Living Conditions Survey in Myanmar (2009-2010): Poverty Profile*, United Nations Development Programme.

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Myanmar's rural-urban divide in access to public services leads to marked differences in outcomes

The poverty incidence in rural areas is double that of urban areas so the patterns described in the above section are also be reflected along rural/urban lines. However, poverty alone cannot explain all the variation in access to services between rural and urban areas.

Whether someone lives in a rural or urban area is a significant factor in determining access to healthcare: 75% of rural households had access to healthcare in 2010, compared to 96% of households in urban areas. Rural dwellers can also expect to have less access to public health programmes, such as immunisation against measles (80% in rural areas compared to 92% in urban areas) and less access to skilled health professionals. For example, only 73% of births in rural areas are attended by a skilled person, compared to 93% in urban areas.

The low level of healthcare provision in rural areas is probably mainly responsible for the marked rural-urban divide in health outcomes. Rural maternal mortality rates are 1.4 times those of urban rates for the nation as a whole. The rural-urban differences at the state/region level can be even more pronounced. Three states/regions – Tanantharyi, Kayah and Yangon – have rural maternal mortality rates which are double or more that of their urban rates. Some states/regions also have large differences in infant and under-five mortality rates between their rural and urban areas. Urban dwellers can on average expect to live nearly two years longer than their rural counterparts.

High levels of food poverty in rural areas, consistently above those in urban areas, can also explain the high levels of malnutrition and poor rural health outcomes. About

85% of the total food poverty in the country is found in rural areas and the food poverty incidence in rural areas is more than double that of urban areas. A 2003 survey found that 41.6% of under-five children were either underweight or severely underweight in rural areas, compared to 30.2% in urban areas, and that 50.5% of rural under-five children were stunted or severely stunted compared to 30.3% in urban areas (Department of Health Planning and National Nutrition Centre, 2003).

Rural-urban differences in education access are also apparent. There are slight differences in enrolment in primary schools between rural and urban areas but the most striking difference can be seen in enrolment rates in secondary education: enrolments are just 47% for rural dwellers compared to 75% for urban dwellers. As with poverty, the physical distance to schools seems to be a significant factor explaining this divergence: access to secondary schools defined in terms of physical distance is just 24% for rural dwellers but 61% for urban dwellers. These access figures would suggest that increasing schools/classrooms in rural areas need to be prioritised to narrow the existing access gap between rural and urban areas. The Ministry of Education has stated that it aims to improve access to basic education by ensuring that pupils ultimately have access to schools within a radius of 1.4 miles. Its plans to accomplish this goal include the building of 15 000 additional partitioned classrooms.

Rural children's education may also be interrupted by their commitments outside of school. In particular, rural children may be expected to help out their families by taking part in the harvest, during which time they will be unable to attend school. The resulting loss of classroom time is aggravated by the style of pedagogy in Myanmar, which is characterised by rote-memorisation, works to the disadvantage of students who can be there only part time because of their outside commitments (Myo, 2010).

Infrastructure provision in rural areas is also far below urban levels in terms of access to electricity, safe water and roads. The urban electrification rate in Myanmar is 89% and just 28% in rural areas (IEA, 2012). By comparison, the average for Developing Asia is 96% for urban areas and 74% for rural areas. Just 65% of rural dwellers have access to safe water for drinking and cooking, compared to 81% of their urban counterparts. However, the rate of urbanisation appears to be outpacing the provision of drinking water from improved sources: between 1990 and 2004, urban drinking water coverage fell by 6% (WHO and UNICEF, 2006).

The Government of Myanmar has recognised the often stark differences in public service provision which exist between rural and urban areas. Its recognition of the need to address the discrepancies is reflected in the priorities set out in the Framework for Economic and Social Reform (FESR). The FESR identifies rural electrification and sustainable community energy development, rural roads and rural/urban connectivity, and rural primary healthcare as areas which need attention and action.

Access varies across Myanmar's states and regions, but is not necessarily worse in the border areas

There are also significant differences in access to public services between Myanmar's states/regions. The incidence of poverty varies across Myanmar's states and regions, leading, as in rural areas, to parallel differences in access to public services. Yet, also as in rural areas, poverty alone cannot explain all the differences seen across state/regional lines. For example, Shan has relatively high levels of poverty incidence, yet performs better in terms of access to public services and outcomes than some states/

regions where the poverty incidence is lower. Sagaing has the second lowest level of poverty incidence in the country, yet performs much worse than poorer states and regions in some areas, such as access to healthcare and access to secondary education.

Some states, such as Kachin and Kayah, rate consistently well in terms of access to a range of public services according to the latest survey data. However, these results may reflect a bias in the sampling as some areas within these states may have been inaccessible during the survey. Access to public services in these states is likely to be worse than the survey suggests.

Internally Displaced Persons (IDPs) in states where ethnic conflict or inter-communal violence occurs are also a particular concern, and access to public services for these groups is seriously restricted. The UNHCR estimates that there were 429 200 IDPs in Myanmar in January 2013. Other assessments estimate that there are more than 125 000 IDPs in Rakhine State, more than 75 000 in Kachin State and northern Shan State and around 250 000 in the southeast of the country (southern Shan State; Kayah, Kayin, and Mon States; Bago and Tanintharyi Regions) (International Displacement Monitoring Centre, 2013). Organisations such as the UNHCR aim to support access to basic services such as clean water, shelter, education and healthcare for these groups.

The level of infrastructure provision also varies along state/regional lines. Access to electricity ranges from 26.4% in Rakhine to 84.6% in Yangon (Figure 3.9). Only 44.6% of the population have access to safe drinking water in Ayeyarwady, the worst-performing state/region, compared to a Union average of 69.4%. The best-performing state of Chin has nearly full access to safe drinking water. According to government figures from 2008, the percentage of urban residents who were served by urban water supply works stands at just 7.2% in Tanintharyi and 79.3% in Kayah state (CSO, 2010). There is relatively less variation along state/regional lines for access to improved sanitation, with the exception of Rakhine which again performs very poorly compared to the other states and regions.

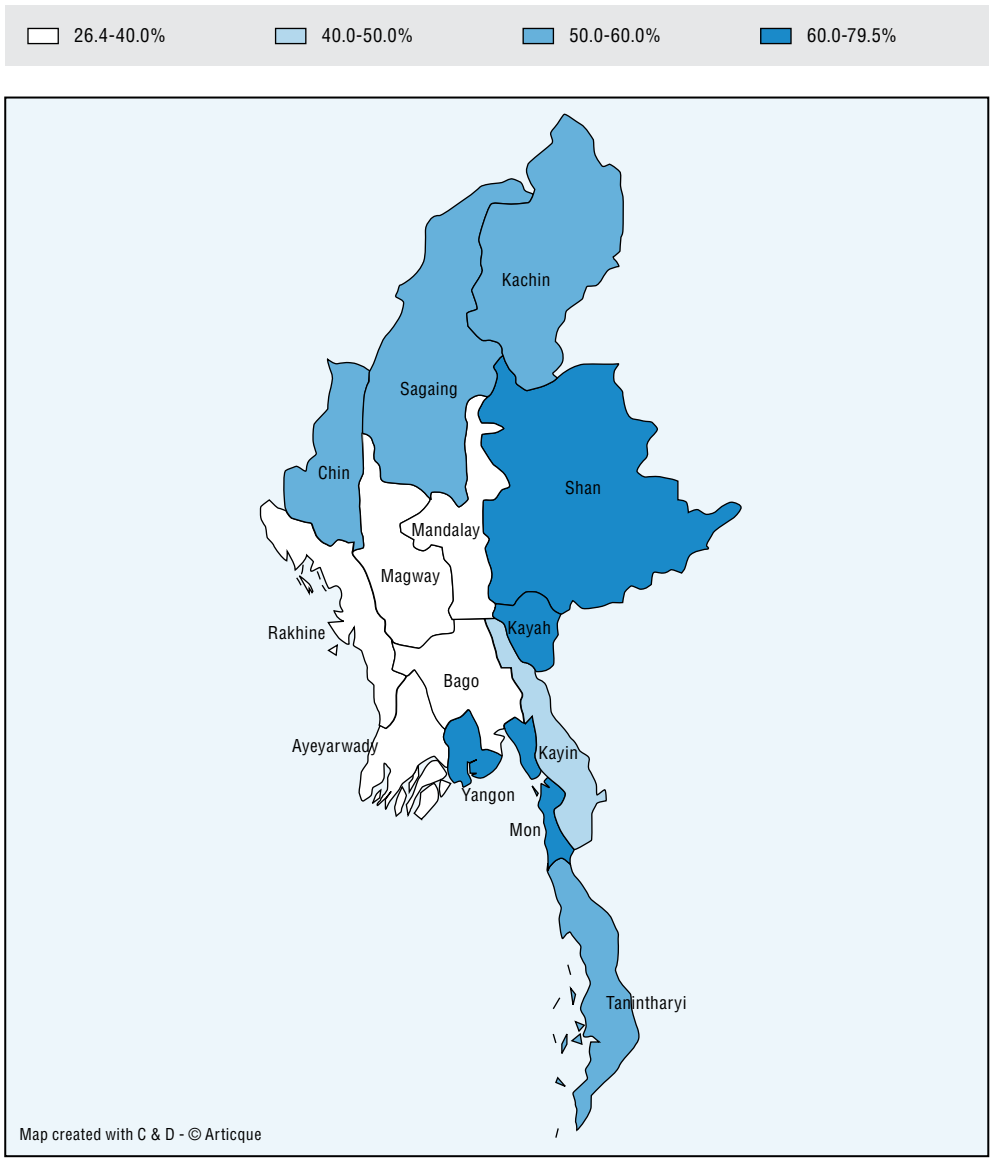
Some border states/regions, such as Rakhine, perform consistently poorly on a number of indicators of access to infrastructure, education and healthcare. However there is not a simple division between poor access in the country's border states and better access in the central regions. In addition to its low access to safe water access to electricity and to healthcare, particularly antenatal care and skilled birth attendants, is worse in the central region of Ayeyarwady than in most other states. Other states/regions perform very well in the provision of some public services and very badly in others. For example, Chin state performs relatively poorly in health (access to healthcare, antenatal care, births attended by skilled person, immunisation), whereas it is one of the best states in the country in terms of access to safe water and sanitation. Kachin, Kayah, Mon and Yangon states/regions do rate consistently well in terms of access to a range of public services across education, healthcare and infrastructure according to the latest survey data. However, as mentioned above, there may be a sampling bias for Kachin and Kayah states as some areas may have been inaccessible during the survey.

Looking more specifically at education, the variation in literacy rates is largest between Myanmar's different states/regions, rather than between urban and rural areas, along gender lines, or as a result of poverty differences. The highest literacy rates are found in Yangon (95.9%) and the lowest in Rakhine (75.1%) and Shan (75.2%). Rakhine ranks at the bottom again in terms of enrolment rates for both primary and secondary school (Figure 3.10). Rakhine also has one of the highest student-to-teacher ratios for primary schools in the country, further indicating poorer quality educational

provision compared to other states. Secondary enrolment rates in Rakhine are just 32%, trailing more than 20 percentage points below the Union average of 52.5% and over 30 percentage points below the highest performing state/region of Yangon, where the secondary enrolment rate is 73.8%. Physical access to secondary schools is an important barrier to access in Rakhine: only 23% of households live within an hour's walk of the nearest school.

Figure 3.9. **Access to electricity varies across the country**

Electrification rate (%)



Source: UNDP (2011b), *Integrated Household Living Conditions Survey in Myanmar (2009-2010): Poverty Profile*, United Nations Development Programme.

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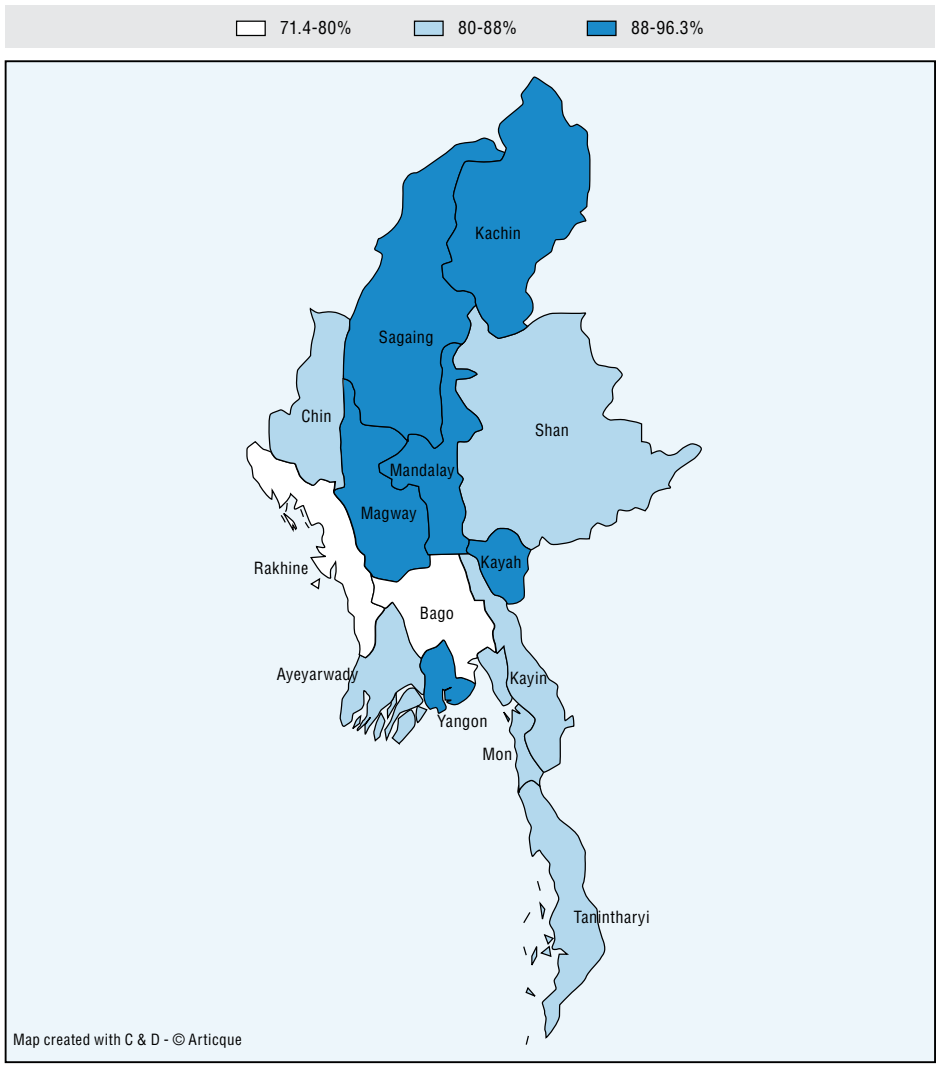
One related issue affecting education is the language policy requiring that Myanmar, the official national language, be the language of instruction in the classroom. This could be a significant barrier to learning for children from ethnic groups who are not fluent in Myanmar, particularly in the early years of education (Myo, 2010).

Access to healthcare varies widely by state/region. Whereas in Kayah state, 100% of the population live within an hour's walk of a hospital or health centre, this compares to just 62.2% in Sagaing and a Union average of 80.9%. Only four states/regions have specialist hospitals: Kachin, Mandalay, Yangon, and Shan. While Mandalay and Yangon are the first and third most populous states, respectively, and therefore could be expected to have specialist hospitals, Ayeyarwady, the second most populous state/region in the country has no such specialist hospital. The size of population per hospital bed in Ayeyarwady is nearly 3 000, almost double the Union average.

Figure 3.10. **Primary school enrolment varies widely by state and region**

Primary enrolment rate (%), 2009-10



Source: UNDP (2011b), *Integrated Household Living Conditions Survey in Myanmar (2009-2010): Poverty Profile*, United Nations Development Programme.

StatLink http://dx.doi.org/10.1787/888932857919

Each state or region's particular history, especially if marked by conflict, will affect its population's access to public services and goods and outcomes in education, health and other key areas. So too will differences in the structures or extent of development of a state or region's administrative system. For example, the Ministry of Border Affairs is the national executing body for the development of border and rural areas. This Ministry has implemented activities in the areas of transportation, education, health, communication and electrification, among others. The ministry is responsible for two colleges and a university which promote access to higher education for remote areas. Civil society organisations (CSOs) have also played an important role in delivering essential public services, especially healthcare services. CSOs often operate in the country's ethnic minority areas and areas which have been affected by conflict. CSOs reportedly face more difficulties in obtaining permission from the authorities to operate in central Myanmar (Kramer, 2011), depriving these areas of this alternative to government provision.

Low levels of public service provision disproportionately affect women

There appears to be little difference in access to public services along gender lines, although years of low public spending on healthcare, particularly maternal health and antenatal care, is likely to have disproportionally affected women. In the education sector, there are no differences in enrolment rates in primary and secondary schools along gender lines. In 2008-09, female students accounted for 49.4% of the student body at the primary level, 49.8% at middle school and 51.9% at high school (CSO, 2010). There is no evidence of discrimination against female students in terms of attainment outcomes: the pass rate for women sitting the matriculation exam at the end of secondary schooling is generally 4-5% higher than the pass rate for male students.

The historic under-investment in healthcare in Myanmar could explain the slightly poorer health outcomes for women, even if women do not face additional barriers to accessing public services. The literacy rate for women is 89%, lagging behind the 96% rate for men. Women are also more likely to suffer from severe malnutrition than men, though only marginally at 10% compared to 8.3%, respectively.

The multi-ethnic state further complicates public service delivery

Some ethnic groups in Myanmar are automatically excluded from access to public services due to their status as non-citizens. While the constitution affords some rights to "persons" in general, other rights are reserved specifically for citizens. In particular, the constitution guarantees the right to education and healthcare and the state provision of compulsory basic education only to citizens.[11] Yet people from certain ethnic groups residing in Myanmar are not considered to be citizens. The UNHCR estimates that there are 808 075 stateless people residing in Myanmar.

The Rohingyas are one such ethnic group. This group was stripped of their citizenship status in 1982 when the Burma Citizenship Law came into force. This law requires that in order to be acknowledged as a full citizen, people must prove that they belong to a recognised ethnic group or that they are descendants of people who were permanently settled in Myanmar prior to the first Anglo-Burmese war in 1823. As such, the Rohingyas are denied access to public services. The Rohingya people live in Rakhine State, which is, as a result, one of the worst-performing states/regions in Myanmar in terms of access to public services and in health and education outcome indicators. Stateless people in Myanmar were given temporary documents which enabled them to vote in the 2010 elections but there has been no progress since then in granting some form of more formal permanent residential status or citizenship.

Building a multi-ethnic nation state

Few countries are ethnically as diverse as Myanmar, but even in countries with only a few ethnicities, building a nation state is a complex task. The modern nation-state is sometimes envisaged as consisting of one people with a shared culture and traditions. But, as in Myanmar, people living in the same country are often diverse, belonging to different ethnic groups. What complicates the situation in Myanmar is that the *de facto* majority has not historically been in charge of the whole country and hence the other ethnicities refuse to be treated as or even called minorities. At the Panglong Conference in 1947, the Chin, Kachin, Shan and other non-Bamar nationalities were promised the right to exercise administrative, judicial, and legislative powers in their own autonomous national states and to preserve and protect their language, culture, and religion in exchange for voluntarily joining the majority Bamar in forming a political union and giving their loyalty to a new state. Thus, building a nation state in Myanmar implies creating an image of the Myanmar nation that is a blend of multiple ethnicities residing in the country. This would involve cultivating a national culture that tolerates ethnic diversity and equality in the treatment of ethnicities.

If national culture becomes irreconcilable with minority cultures, there appears to be a trade-off between the nation state and minority cultures and either nation building prevails at the weakening of minority cultures, or nation building remains incomplete for the sake of preserving cultural diversity. In Myanmar, the delicate balance between nation building and preserving cultural diversity will need to be struck if national unity is to be maintained and progress toward a multi-ethnic nation state sustained.

Ethnic diversity

The present administrative system of seven states, seven regions, five self-administered zones, a self-administered division and a union territory oversimplifies the reality of a multiplicity of ethnic sub-groups in Myanmar. Officially, 135 ethnic minorities reside in the country, though the biggest eight ethnic groups are thought to make up 80-90% of the population. There are no precise data on the numbers of the ethnic populations, as the last census was conducted in 1983. The upcoming 2014 census will provide an update on the shares of the ethnicities as well as of the size of the total population. In seven regions the Bamar are in the majority, while the other largest ethnic groups have their own states (the Shan, Karen, Karenni, Mon, Chin, Rakhine and Kachin) where they constitute a majority. Such an administrative division excludes the remaining ethnic groups from self-determination, even though some are granted a certain degree of autonomy in self-administered zones and a division. This exclusion in turn carries the risk that with the democratisation of the system, an increasing number of ethnic groups will demand a separate constituent state, as the Wa ethnic group has done recently.[12]

The administrative status of ethnic regions has changed over time, reflecting both historical settlings and more recent developments. Myanmar as a unified country was born in 1948 when the former British territories of Upper and Lower Burma, the Karenni States, the Karen States, the Federated Shan States and Wa States, a new Kachin State and the Chin Territory were united. In terms of administrative structure, Myanmar started with only 4 states (the Shan, Karen, Karenni and Kachin) and a special division for the Chins at the time of independence from the British Empire; these were defined in the first Constitution of 1947. The Shans and the Kachins were among the signatories of the Panglong Agreement in 1947 that granted relative autonomy for states while at least

temporarily keeping the union together (with a possibility of secession within ten years). The Karens and Karenni opposed a union and favoured independence instead, but they were brought into the union and granted their own states, while the Chins were among the signatories, but were originally not provided a separate state, only a special division. The 1974 Constitution added the Mon and Arakan (Rakhine) States. Although the number of states has not changed since then, the 2008 Constitution granted a certain degree of self-determination in the form of self-administered zones for the five ethnic groups of Naga, Danu, Pa-o, Pa-laung and Kokang (the Kokang was the First Special Region of the Northern Shan State from 1989) and a self-administered division to the Wa ethnic group.

The native languages of the major ethnic groups are distinct, with some having multiple dialects. Some of those languages are ancient, such as the Mon whose script served as a basis for the Bamar script, while others such as the Wa do not have a written form and use other languages; the Wa, use Chinese for written communication. Ethnic diversity is manifest not only in different native languages and cultures, but also religions. While the majority Bamar and the Mon, Shan and Rakhine are mainly Buddhist, the Chin and Kachin are mainly Christian and there is a sizeable portion of Christians among the Karen and Karennis as well. Islam is the third largest religion, practised by ethnic groups such as the Rohingya in the Rakhine State. Assimilationist pressure during the previous regimes strengthened not only ethnic but also religious identity, notwithstanding involuntary displacements and large-scale emigration during the previous five decades.

Myanmar's ethnicities are also diverse in terms of their historical heritage. At the one extreme, the Mon have the longest history with their civilisation being the first one identified in the territory of today's Myanmar, dating back 5 000 years. At the other extreme, there are recent settlers as a result of the opening to the outside world in the 1990s. Many of these new migrants are Han Chinese attracted by economic opportunities. In between are the other ethnic groups, such as the Bamar that had controlled the central part of today's Myanmar over the past centuries, occasionally fighting with the surrounding independent or semi-independent states. The British colonisation also brought about further diversification: a large number of Indians and Nepalis were brought into the country, mainly as civil servants of the Empire.

Ethnic conflicts and their driving forces

In multi-ethnic states often there exists a ruling or dominant ethnic majority along with one or more minorities and the culture of the majority groups dominates the culture of the nation. This creates identity anxiety for minorities who are attached to their own cultural heritages and aspire to have them recognised and respected in the nation's institutions. Beyond identity anxiety, ethnic conflicts may emerge out of a combination of economic, political, as well as cultural inequality and competition among majority and other ethnicities. When the dominant ethnic group is more powerful economically and/or politically and expresses a sense of cultural superiority, cultural differences can escalate into emotionally loaded ethnic hostility. In Myanmar, although some of the poorest regions are inhabited by the ethnic majority, other ethnicities were excluded from powerful positions in the government or the military in the past decades, which disadvantaged them in terms of career opportunities and social mobility.

Ethnicities thus may attribute their state of being disadvantaged to the "oppression" of the more successful majority group. The solution involves introducing policies that mitigate ethnic differences in social stratification. Also, creating a career path in government administration with the aim to attract the best people regardless of ethnic

or cultural background could reduce such inequalities, while contributing to cultivating the image of a multi-ethnic nation with equal opportunities. Affirmative action is an often used policy instrument to strengthen the position of minorities in not only a cultural but also economic sense. Affirmative action policies favourable to some minorities, however, may create new injustices to the majority and other minorities, which can exacerbate ethnic confrontation and may fail to solve the problems of minorities.

Inter-ethnic conflicts can be traced back for many decades. Conflicts between the majority Bamar and the Karens and Kachins *inter alia* relate to the siding of the latter ethnic groups with the British and their opposition to a union. Not surprisingly, these two ethnic groups were the only ones not welcoming the Japanese army in 1943. In addition to pre-independence historical grievances, forced assimilation by a number of measures such as repressive language policy in education, unequal career opportunities in public administration and unequal access to economic opportunities resulted in a feeling of resentment by the smaller ethnic groups towards the majority Bamar that has controlled the Union government since independence. By the same token, ethnic conflicts arose between majority ethnic groups within states and smaller ethnicities and sometimes escalated into armed conflicts such as that between the Shan State Army and Wa rival armed groups. For a long time, the use of minority languages was restricted not only in education but also in public media and fora. Ethnic language publications were banned in 1962, when the military government took over. Thus the announcement at the end of 2012 to allow the publication of ethnic language newspapers beginning from April 2013 was a major step. Ethnic groups that have agreed to cease fighting, such as the Wa, the Kachin and the Mon, also have been permitted to choose the language of instruction in their schools, although at their own expense.

Ensuring peace and government control over the whole territory of the country and respecting the rights of minority ethnic groups are mutually reinforcing requirements for strengthening the legitimacy of the government. Minority ethnic groups are an important election base and are key to union-wide peace and security. In addition, owing to their geo-strategic locations, they are indispensable for the improving of political and economic relations with neighbouring countries. The eradication of opium growing and the halting of drug production and smuggling as well as the smuggling of minerals, agricultural and forestry products and the closing of illegal businesses in border areas are only possible through a joint effort with ethnic groups involved in those activities.

Building trust for inclusiveness

Trust is an essential element of the social capital required to sustain Myanmar's development. There are relatively low levels of trust in government and other formal institutions. For example, as discussed in the previous chapter, there is a high level of mistrust in the formal banking system and in the currency that has inhibited the development of an efficient financial system. This mistrust risks undermining an inclusive development process as the level of trust in government will affect people's willingness to take part in co-operative action and accept policy reforms. Transparency and accountability are essential elements in trust-building, yet important institutions which help hold government to account – such as a free press, a vibrant civil society and space for public debate – have been largely absent in the country for a number of years.

While people's trust in government institutions is generally weak, that is not to say that trust is completely lacking in the country. The existence of the *hundi* system of

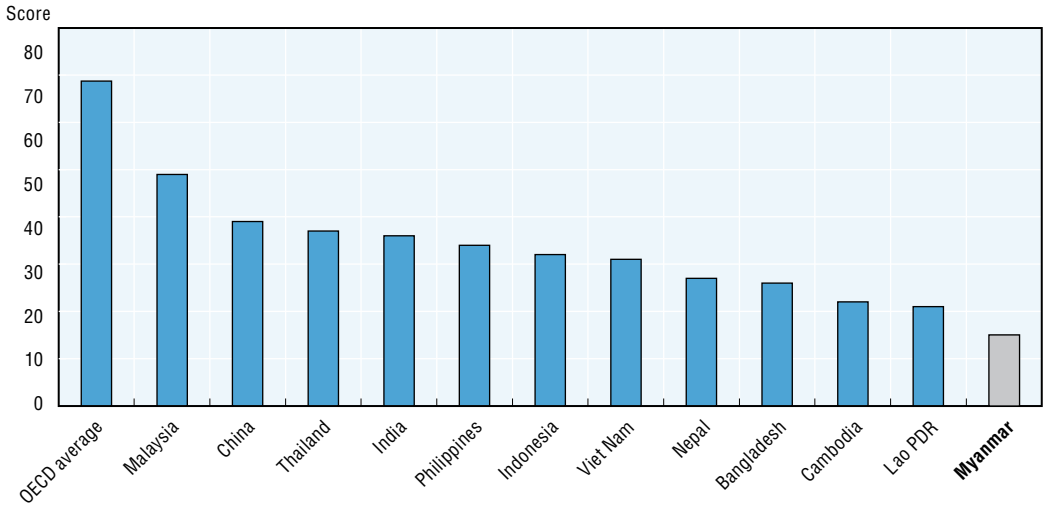
informal money transfer is proof of this, as its functioning depends on high levels of trust between all the actors in the system. It is also interesting to note that people's confidence in religious institutions is very high in Myanmar: in a 2012 poll, 96% of respondents said they had confidence in religious organisations, the second highest rate in Southeast Asia after Lao PDR and one of the highest in the world (Gallup Organization, 2013). This may not be surprising given that 98% of people said that religion was an important part of their daily lives. But as well as serving people's spiritual needs, religious organisations have traditionally stepped in to provide education and other social services to communities where government services have been lacking or the poor functioning of the market has meant that people's needs have gone unmet.

Trust in government and public policy making is weak

Historically, there has been a general lack of trust in the government's intentions to act in the wider public interest and to formulate policies that benefit the populace. Poor quality or, in some areas, non-existent public service delivery is a result of inadequate government spending on education, healthcare, social services and vital infrastructure: education accounted for around 4% of public expenditure between 2003/04 and 2008/09 and healthcare just 1% for the same period.

Figure 3.11. **High levels of corruption in Myanmar compared to international standards**

Corruption Perceptions Index 2012



Note: A lower Corruption Perception score stands for higher levels of corruption in a country.
Source: Transparency International (2012), *Corruption Perceptions Index 2012*, www.transparency.org/research/cpi/overview (accessed 10 March 2013).
StatLink *http://dx.doi.org/10.1787/888932857938*

Persistent corruption has also undermined confidence in the government. High-level corruption in the form of cronyism and nepotism is compounded by low-level corruption affecting people's everyday lives in Myanmar. Businesses and individuals are regularly faced with corruption by public officials, for example, asking for bribes – colloquially referred to as "tea money" – in exchange for the issuing of licenses or permits. The level of corruption in Myanmar is high by international standards and compared to its regional peers. Myanmar ranked 172 out of 176 countries in Transparency International's 2012 Corruption Perceptions Index (Figure 3.11), which focuses on corruption in the public sector, or corruption which involves public officials, civil servants or politicians.[13]

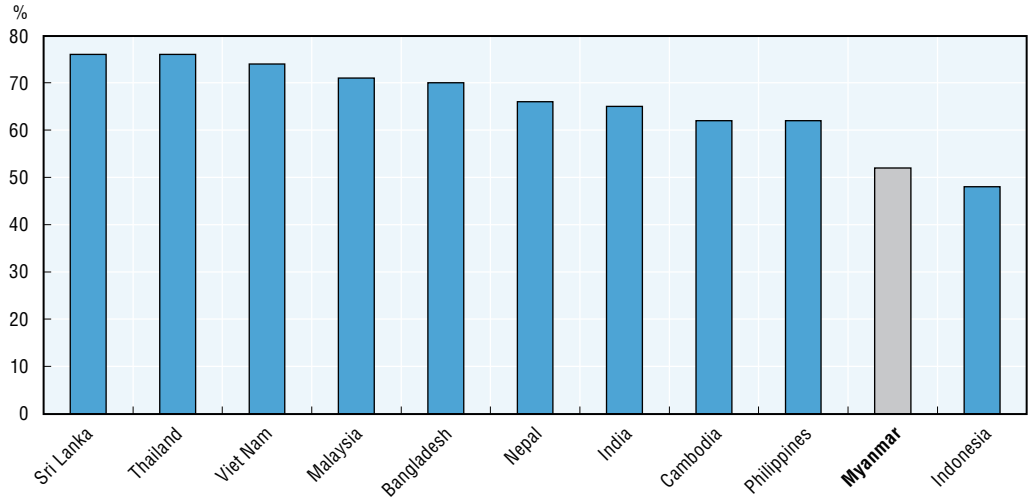
The lack of standardised procedures and fees, for example in customs valuation, opens up opportunities for petty corruption. Other features of the system create incentives for corruption. For example, as recently as January 2013, customs department officials admitted that employees were entitled to a 10% share of all custom fines imposed. Furthermore, although Myanmar does have a code of conduct for public officials (UN, 2002), the weak rule of law in the country means that any public official in a position to grant licenses, permits or other permissions has the opportunity to abuse their power for personal gain with little fear of sanction.

The government has acknowledged the problem of both high-level and petty corruption in the country and has vowed to fight them as part of the president's third wave of reforms to achieve "good governance and clean government". A planned new anti-corruption law will give authorities power to investigate and prosecute those involved in corruption in the public and private sectors. The president also recently created an action committee to fight corruption and bribery in government organisations.[14] Cases of corruption are already being investigated and dealt with. In February 2013, the government reported that nearly 17 000 civil servants, including around 700 police officers, had been punished between April 2011 and December 2012. In January 2013, the government opened an investigation into alleged high-level corruption in the telecommunications ministry.

The lack of trust extends to other institutions in the country which are associated with the government. In a 2012 poll, just 52% of respondents in Myanmar said they had confidence in the judicial system and the courts (Figure 3.12).

Figure 3.12. **Trust in the judicial system and the courts is lower in Myanmar**

Percentage of the population who have confidence in the judicial system and courts, 2012



Source: Gallup Organization (2013), *Gallup World Monitor*.

StatLink *http://dx.doi.org/10.1787/888932857957*

The judicial system is heavily influenced by the executive and the military and is generally regarded as corrupt and court procedures as lengthy and inefficient. The judiciary's supremacy, independence and impartiality are not established throughout the country, especially in rural provinces and ethnic regions but also in major cities (International Bar Association, 2012). While the new constitution officially separates

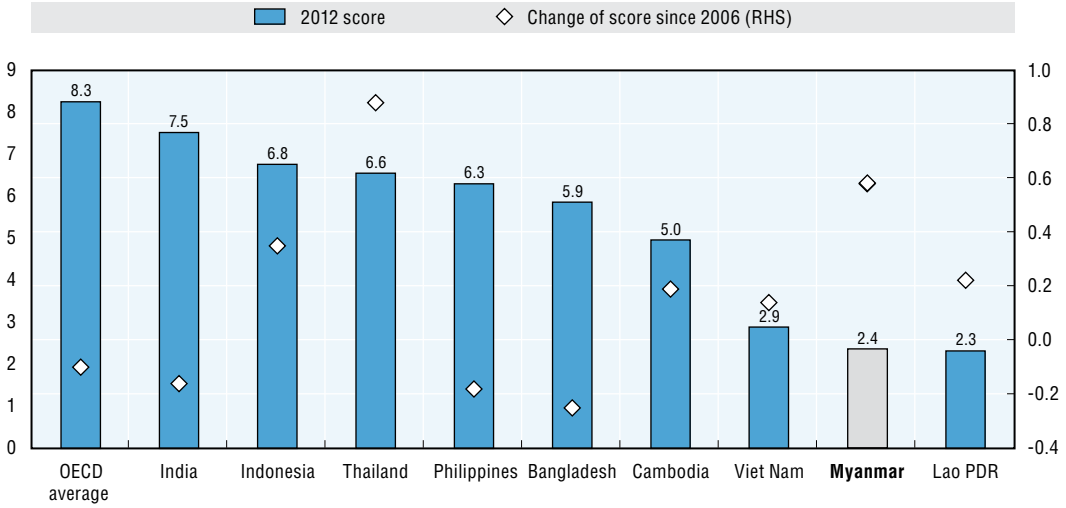
these powers, the executive still wields much influence over the judiciary. Nominations made by of the head of the Supreme Court (the chief justice) and the chair and members of the constitutional tribunal were approved without discussion by parliament in February 2011 (BTI, 2012).

Political reforms are beginning to improve trust in some areas

The political reforms which spearheaded the country's recent transition, including the release of a number of political prisoners, the legalisation of the main opposition group the National League for Democracy (NLD), and the negotiation of ceasefire agreements with the majority of the country's armed ethnic groups, are helping to improve trust although the progress is fragile. According to Freedom House, political rights in the country improved between 2011 and 2012 due to the successful participation of opposition parties in legislative by-elections, although it still classifies the country as "not free". The recent reforms have resulted in a slightly improved score for Myanmar on the Economic Intelligence Unit's Democracy Index (Figure 3.13) which measures electoral process and pluralism, civil liberties, functioning of government, political participation, and political culture.

Figure 3.13. **Democracy in Myanmar is improving but is still at a low level compared to its peers**

EIU Democracy Index, 2012



Source: EIU (2012), *Democracy Index 2012: Democracy is at a Standstill*, Economist Intelligence Unit, www.eiu.com/public/topical_report.aspx?campaignid=DemocracyIndex12.

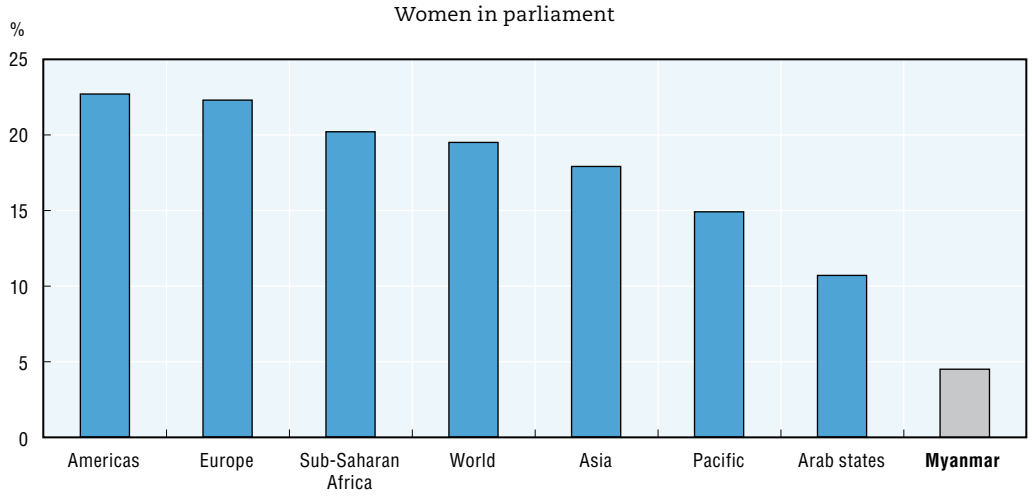
StatLink *http://dx.doi.org/10.1787/888932857976*

A largely civilian parliament was installed in 2011 which is composed of representatives of all the country's states and regions. So far this appears to be a genuine forum for debate, going some way to strengthen the political voice of the country's different states and regions, ethnic groups and opposition parties within the formal political process. Parliamentarians' freedom to express their views openly is protected by law and there have not been any cases of parliamentarians being targeted for being critical of government policy. A significant moment which boosted trust in the political process was the legislative by-elections held in 2012 and the recognition by the government of the result, as previous elections have been deemed unfair.

Progress in political reforms so far has been promising but there is still some way to go towards true political inclusion and representation, in particular given the still strong presence of the military in politics. The constitution guarantees the military 25% of all seats in the parliament, which effectively enables the military to veto any amendments to the constitution. Trust in the new political architecture, particularly from ethnic groups, is undermined by the daily realities in the ethnic regions, which are still under the effective control of the national armed forces, the *Tatmadaw* (Transnational Institute/Burma Centrum Netherlands, 2012). Armed ethnic groups have yet to formally engage with the national and regional legislatures. In addition, in Myanmar's regional parliaments, Chief Ministers are appointed by the executive, raising the question of how representative of the state/region these Ministers are.

Women's participation in Myanmar's political institutions is still limited. Despite the high profile political role of opposition leader Daw Aung San Suu Kyi, women remain under-represented in parliament, accounting for just 30 of the 664 parliamentarians (Figure 3.14). There is just one female minister among the 36-member Cabinet.

Figure 3.14. **Women's participation in political institutions is limited**



Note: Regional/World data are from 2011; Myanmar data are from 2012.

Source: IPU (2013), *Inter-Parliamentary Union* (database), Inter-Parliamentary Union, www.ipu.org/wmn-e/classif.htm; UN Women (2013), United Nations Entity for Gender Equality and the Empowerment of Women, http://unwomen.org/; and International Bar Association (2012), "The rule of law in Myanmar: Challenges and prospects", www.ibanet.org/Document/Default.aspx?DocumentUid=DE0EE11D-9878-4685-A20F-9A0AAF6C3F3E.

StatLink *http://dx.doi.org/10.1787/888932857995*

Greater transparency and accountability will be vital to building trust

Mechanisms to ensure transparency and accountability, vital to generating trust between citizens and their government, have been restricted in Myanmar for a number of years. A free press, the ability of people to freely organise themselves, and in general an atmosphere of critical public debate without fear of reprisal have been largely absent, although recent reforms have brought about improvements. According to Freedom House, Myanmar's civil liberties rating improved from 6 to 5, due to the continued easing of long-standing restrictions on the media, private discussion, public assembly, civil society, private enterprise, and other activities.

Formal non-state organisations, including cultural associations or religious organisations which carried out social programmes, have existed for many decades in Myanmar but many suffered under military rule (Kramer, 2011).

Civil society in Myanmar still faces obstacles, but the situation looks set to improve under the current reforms. Currently, the registration process for civil society organisations is lengthy and complex, involving separate registration at both national and local levels (Kramer, 2011). In January 2013, the president stated that the government will relax the requirements for the registration of associations and restriction on their activities in order to enable political parties and civil society organisations to operate freely. This will be an important step forward. Not only can civil society groups help support development by providing vital social and community development services, a stronger civil society will also help empower ethnic groups which have suffered from exclusion in the past.

Media is an important mechanism for holding governments to account and promoting transparency. Although Myanmar's constitution provides for freedom of expression and freedom of the press, in practice many laws still impede media freedom. The country is assessed as "Not Free" according to Freedom House's Freedom of the Press index. The index identifies the political environment[15] as the worst-performing area out of the three categories covered by the index,[16] although the country also performs poorly on legal environment (laws and regulations that influence media content). In addition, the political environment has been judged to have improved the most during the recent reform period (comparing 2009 with 2011), while there has been only a slight improvement in the legal environment.

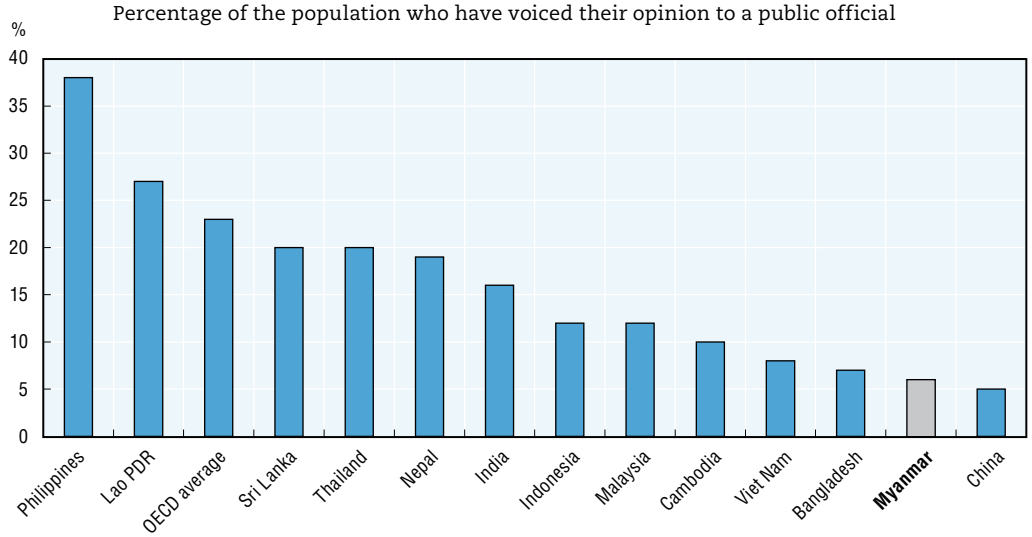
Although the climate for media has been gradually improving under the reform process, obstacles to media freedom remain. A number of journalists' organisations have been established which aim to participate in building the legislative framework for media in the country (Reporters without Borders, 2012). The censorship of print publications has progressively been lifted since June 2011, culminating in the complete removal of media censorship in August 2012. Privately-owned dailies were allowed to start publishing in April 2013. However, other laws restricting freedom of expression are still in place which mean that journalists do not have the necessary legal protections to enable them to hold the government to account. For example, as recently as 2012, the Ministry of Mines launched criminal proceedings against a local news journal over corruption allegations made against them. Reporting on the conflicts in border areas is limited and journalists confront problems in accessing the areas due to reporting restrictions imposed by the government. A proposed new law on printing and publishing that was submitted to parliament in March 2013 contains provisions that would limit media freedom.

Until recently there has been limited opportunity for people in Myanmar to participate in public debate and political dialogue. The Peaceful Gathering and Demonstration Law, introduced in December 2011, allows citizens to hold peaceful protests. This is a significant step forward from previous laws which banned all marches, demonstrations and gatherings of more than five people and enabled the arrest, prosecution and imprisonment of peaceful protesters. However, the new law still imposes a series of measures which are restrictive of peaceful public assembly (Human Rights Watch, 2012). Public protest is one of the only channels necessary to allow people in Myanmar

to express their opinions. Public consultations with local communities, for example, over major investment or infrastructure projects, are infrequent. A culture of dialogue between authorities and local communities is under-developed (SiuSue, 2012). In a recent poll, only 6% of respondents in Myanmar said that they had voiced their opinion to a public official in the last month, one of the lowest rates in the region (Figure 3.15).

Figure 3.15. **Few people voice their opinion to a public office in Myanmar**

Percentage of the population who have voiced their opinion to a public official



Note: The OECD average is the average of the 34 member countries of the OECD. All data are from 2012 except for the OECD countries of Chile, Germany, Japan, Mexico, Korea and United Kingdom which are from 2010.

Source: Gallup Organization (2013), *Gallup World Monitor*.

StatLink *http://dx.doi.org/10.1787/888932858014*

Notes

1. Poor households are defined as households which fall below the poverty line which is based on two criteria. First, minimum food expenditures to satisfy caloric requirements; second, reasonable non-food expenditure to meet basic needs. In 2005, the poverty line was 162 136 kyats (USD 158.18 or 29% of median consumption), and in 2010 it was 376 151 kyats (USD 468.43 or 30% of median consumption) (UNDP, 2011c).
2. Priorities as set out in the Ministry of National Planning and Economic Development "Framework for Economic and Social Reform" (2012).
3. The enrolment rates referred to are net enrolment rates, which is the share of children of official primary/secondary school age that are enrolled in primary/secondary school.
4. Households which fall below the poverty line will be referred to as poor households, those above as non-poor households.
5. Unless otherwise stated, figures in this section are taken from the *Integrated Household Living Conditions Survey in Myanmar 2009-2010*, as reported in UNDP (2011b) *Integrated Household Living Conditions Survey in Myanmar 2009-2010: Poverty Profile*.
6. Estimation by Dr. Myo Tint as reported in ReliefWeb http://reliefweb.int/report/myanmar/monastic-education-only-option-burma%E2%80%99s-poor.
7. Physical access to health care is defined as "those living within one hour's walking distance (1.23 miles) of a hospital (including township hospitals, public specialised hospitals and station hospitals) or health centres, sub-rural health centres, maternal and child health centres" (UNDP, 2011b).
8. Currently only about 600 000 people (1% of the population) are covered by social security which gives access to healthcare. The new Social Security Law, passed in 2012 to come into force in 2013, aims to increase coverage to about 10 million people.
9. Safe drinking water includes "private tap water, public tap/stand pipe, tube well/bore hole, protected hand dug well and protected spring/pond/rainwater. It excludes commercial bottled water, water sold by any means, unprotected hand dug well and unprotected spring/pond/rainwater, river/stream and lake/dam. Access requires that a safe drinking water source is within 30 minutes walking distance [...] or approximately 1 kilometre" (UNDP, 2011b).
10. Improved sanitation includes flush toilet connected to sewage system or septic tank, pour flush toilet with water seal, covered pit latrine with food step lid and direct and indirect covered pit latrine without foot step lid. It excludes open pit latrines, bucket/pan latrine, surface/hanging latrine and no facilities (UNDP, 2011b).
11. See Paragraphs 366 and 367 in Chapter 8 of the 2008 Constitution of the Republic of Myanmar.
12. The Wa States joined the Union of Burma in 1948 together with the Federal Shan States, when they have administratively become part of the Shan State until they were granted a self-administered division by the 2008 Constitution. Pre-independence, only one of the Wa States (Mang Lern) was part of the Federated Shan States (which were formed in 1922).
13. The data sources used by Transparency International to compile the index include questions relating to the abuse of public power and focus on: bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and on questions that probe the strength and effectiveness of anti-corruption efforts in the public sector. As such, it covers both the administrative and political aspects of corruption.
14. The nine-member committee on corruption was established in January 2013 and is under the chairmanship of Vice President Dr. Sai Mauk Kham.
15. Defined as political pressures and controls on media content, including harassment or violence against journalists or facilities, censorship, self-censorship, etc.
16. The three categories are legal environment, political environment and economic environment.

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The way ahead for Myanmar

Myanmar through the lenses of sustainable and equitable development

Myanmar faces a crucial few years to come to ignite economic growth and embark on a higher, more sustainable and more equitable development trajectory. Present conditions and policies would allow for annual growth of 6.3% over 2013-17, below the government target of 7.7%. To reach this target, reforms need to accelerate, in particular to increase labour productivity so as to allow incomes to rise and to reduce poverty. Gaining the momentum to jump on the development bandwagon of the region is even more important as Myanmar's population will start ageing in a couple of decades. Before that happens, the demographic dividend needs to be reaped and the potential of the economy lifted by productivity-enhancing reforms, including boosting investment.

Once the economy has taken off and its potential growth is boosted, the key challenges will be to ensure that development is sustainable and creates equitable opportunities. Sustainability requires the addressing of some potential sources of instability such as the high debt burden, monetisation of the fiscal deficit, inflation and exchange rate volatility. In addition, current unsustainable practices in the exploitation of natural resources including agricultural land need to be halted and competitiveness in all sectors improved to pave the way for the transformation to an industry- and service-based economy accompanied by urbanisation.

Development can only be sustainable if it is equitable, benefitting all. There are different growth trajectories and the choice needs also to depend on which pattern is conducive to equity. While Myanmar performs relatively well in a number of facets of equity, such as participation rates or women's role in the economy and society, development has been uneven between rural and urban areas and between the centre and the periphery (but unlike in other countries, to the advantage of the latter). The major dimension of unequal development in Myanmar is among the privileged and the powerless. The sustainability of development requires addressing this dimension of inequality. Providing equal access to public goods and services is one way to improve people's ability to experience a full and healthy life. The allocation of the additional resources planned for public services and goods needs to be wisely targeted to reduce rather than amplify existing inequalities along rural-urban, regional and income lines.

Limited institutional capital is the most important constraint to development

Presently, all the major forms of capital in Myanmar – human, physical, institutional and social – are limited and will pose binding constraints on the country's development until they are alleviated. Of these, institutional capital is the most crucial as it is essential to accelerate the formation of the other types of capital. The lack of institutional capital originates in the country's history, but the accession to power of a new government regime committed to bringing about a democratic political system offers the opportunity for a fresh start in shaping new institutions.

The types of institutions that need to be strengthened, reformed or established include those serving the creation of a functional state and nation building as well as frameworks for policy making. Yet even a well-designed institutional structure will not be successful if people do not have trust in it. Given Myanmar's particular history, ensuring the rule of law is a major first step, entailing the establishment of the supremacy of the law, where no one is above the laws and where accountability, transparency and the voice of the populace are upheld. Path-breaking measures have been adopted to improve trust in the supremacy of the law: a well-functioning parliament is forming, and the media and press are active in covering issues that used to be taboo in the past.

- However, there is still ample room to involve the general public in the discussions of the proposed laws and regulations and the uncovering of unlawful cases.

Accountability is being strengthened and the social contract between the government and the populace connoting the rights and responsibilities of each has begun to function, but more will need to be done.

- Accountability between the privileged and the poor needs strengthening as well to increase the perception of social justice and thus enhance the legitimacy of the government. This may need to include revisiting of unlawful or unfair deals in the past not only where government was involved but also where private entities were the beneficiaries.
- Voice and accountability can be further strengthened by an effective devolution of powers. A form of federalism that is effective for Myanmar needs to be developed through experimentation, since the complexity of ethnic issues and the presently weak capacity at the sub-central level make it difficult to adopt any models from other countries.

The creation of frameworks for effective macroeconomic policies, including monetary and exchange rate policies, fiscal policies, and financial policies is critical to the achievement of stable and sustainable growth. The recent unification of exchange rates and the establishment of the basis for an independent central bank are very important steps toward creating these frameworks. To complete these frameworks, a number of further areas will need to be addressed, beginning in the near-term.

- Distortions that have led to extensive dollarisation and the large informal financial sector will need to be removed if monetary policy is to be able to effectively stabilise the economy. The formalisation of financial activities is a pre-condition for establishing an efficient, prudent, and stable financial system.
- Financial regulatory and supervisory capabilities will need to be developed to establish and enforce prudential norms for financial institutions and markets so that the financial system remains stable.
- Development of financial markets, starting with the inter-bank market, needs to be accelerated in order to improve the transmission of macroeconomic stabilisation policies to the economy. Development of financial markets is also needed to limit the risk that fiscal deficits will destabilise monetary policy control and lead to inflation; and to contain risks to exchange rate stability and the domestic financial system from large surges in capital inflows.
- Reforms to strengthen government revenue raising capacity through tax reforms and improved compliance will be needed as soon as possible to meet the need for higher government spending on public goods and services conducive to development and to maintain public debt at a sustainable level in relation to GDP.

Strengthened institutional capacity to effectively manage and preserve Myanmar's environmental resources will be essential to sustainable growth, particularly given the further environmental risks posed by industrialisation, urbanisation, the influx of FDI, and the increased use of fertilisers and pesticides as the agricultural sector is developed. The capacities to deal with climate change need to be developed as Myanmar's coastal and delta regions are likely to be particularly affected by the increase in variations in sea level and in the frequency and intensity of tropical cyclones accompanying global warming. The authorities have made remarkable progress in a short time in laying key foundations for more effective environmental policies but further steps will be needed to build on this foundation.

- Environmental considerations need to be integrated into overall development plans and the structures and arrangements for co-ordinating environmental policy making and implementation across the government laid out in the new Environment Law need to be implemented and strengthened where necessary.
- Key analytical tools such as Environmental Impact Assessments and Strategic Environmental Assessments as well as environmental policy instruments need to be further developed.
- Equally important is to strengthen and further develop institutional means to involve non-government actors in advising and implementing environmental strategies and policies.
- The ultimate success of the efforts in these areas will depend critically on improvements in key enabling conditions, notably property rights, the rule of law and institutions supporting markets and the private sectors.

Institution building in a wide range of areas is critical to business sector development …

Laying the foundations for an enabling environment for private sector development is critical to strengthen market mechanisms and to accelerate the structural transformation process to an industrialised economy with a sizeable services sector. The process of developing and updating of key laws concerning the private sector, beginning with the new laws on foreign investment and labour organisation, is already underway. Further changes in legal frameworks will be needed to foster the development of a vibrant and entrepreneurial business sector, addressing company laws and commercial codes; labour laws; contract laws; bankruptcy laws; banking and insurance laws; laws incorporating international accountancy and auditing standards; arbitration law, intellectual property laws, laws concerning the judicial system and the civil service; and criminal law. Of particular priority are the following:

- upgrading of the Myanmar Companies Act (1914) and associated regulations based on international best practices and lessons learned in neighbouring countries;
- development or upgrading of other business laws such as contract law, bankruptcy law and arbitration law;
- development of a general investment law for both domestic and foreign investors, which may cover special economic zones, or integration of such investment law into the general company or commercial law based on a thorough review of all existing incentives and restrictions, in consultation with the Tax (or Revenue) Bureau and other ministries/agencies concerned;
- development of SME law, covering small and micro-sized enterprises and business co-operatives.

To ensure that these laws are successful, the government regulatory structure for business in Myanmar will need to be strengthened. The present structure is fragmented, with overlapping and sometimes conflicting responsibilities, priorities, and regulations, and this fragmentation causes problems with policy co-ordination and implementation.

- A central focal-point ministry might be set up to strengthen co-ordination and improve coherence of policies on business sector development while identifying problems encountered across different sectors. It could then serve as a central location where country-wide business and investment policy is proposed while maintaining the leeway of certain specialised ministries to regulate sector- and industry-specific activities.

Development of the private sector also will require strengthening of enabling conditions to support a greater diversity of business enterprises in the formal economy and to provide a level playing field among them.

- Capacity building to support SMEs, which have the potential to develop into viable and competent partners for both domestic and foreign investors, will be particularly important. Efforts also need to be made to reduce unnecessary regulatory and other burdens discouraging businesses from operating in the formal sector.
- Improvement in the capacities of commercial banks to assess credit-worthiness will be key to improving private businesses access to external credit. Establishment of a public credit bureau and development of credit-guarantee facilities to improve access to external funds for SMEs as well as start-ups and other less established businesses might be considered.
- Further corporatisation and privatisation should be undertaken to provide a level playing field for all business entities in Myanmar.
- The development of special economic zones can be linked with border area development in co-operation with neighbouring countries, particularly focusing on export processing for labour intensive manufacturing.
- Business associations can play an important role and their role should be supported by the country's overall legal and regulatory framework.

… and essential to human capital accumulation and creation of equitable opportunities

Improvements of the institutional capital are also needed to support the accumulation of other forms of capital, that is, to address other binding constraints for broad-based development in Myanmar. The improvements are equally important to ensuring that growth provides equitable opportunities and helps to reduce, rather than increase, the now considerable disparities in income and other dimensions of well-being across population segments and regions.

Moving up the value chain, which is a central requirement for sustained increases in income, is conditional on human capital formation to ensure the availability and quality of skills that will be needed to make the economic transition. A pre-requisite for provision of adequate professional skills is access to high quality basic education (defined by primary and non-vocational secondary education). Access to basic education has improved over the last twenty years in Myanmar, however, school dropouts at the primary level and low enrolment rates at the (non-mandatory) secondary level imply continued challenges.

- Improving access to education needs to be balanced with the country's capacity to hire teachers. Recent trends have shown that improved access to secondary education has gone faster than recruitment of new teachers.
- Broad access to education does not go far beyond the most fundamental literacy skills, given that only primary school is legally guaranteed and compulsory. In the medium term, mandatory schooling should be extended to at least lower secondary education in order to keep up with international standards.
- Full access to basic education, including secondary education, which is still very low in Myanmar, can only be achieved through a well-thought-out increase in government spending on education. Increased education spending needs to be focused on the most important constraints on access to education, notably logistics (including the availability of school facilities and teacher training institutions, transportation to schools and teaching materials) and on improving incentives for teachers, students and their families. In particular, incentives to be trained and work as a teacher and to work in rural regions, and the incentives as well as capabilities for families to send their children to school, need to be strengthened.
- Quality issues related to education have recently been addressed through upgraded teacher training programmes. In the medium term, however, the duration of all teacher trainings (including those for the primary and lower secondary level) needs to be extended to three-year programmes to improve the quality of Myanmar's education system and benchmark it to international standards. Furthermore, teacher training curricula should include practical pre-service trainings to prepare the new teachers to their future role more systematically.
- Monitoring initiatives (such as school inspections) need to be accompanied with better tools to assess quality improvement policies. Participation in PISA, an international study launched by the OECD in 1997, would be one option.
- Skills provision during the economic transition in Myanmar needs to go beyond basic education. Comparisons with fast-growing emerging and already industrialised economies as benchmarks suggest that Myanmar is lagging behind in the accumulation of skills that will be needed for its development in the years ahead:
- Myanmar has quickly expanded the number of programmes and enrolled students in tertiary education across all regions of the country. This may have come at the expense of higher education quality; not least due to its limited budget. In the years ahead, the focus in the area of tertiary education should be given to benchmarking the quality of programmes to standards in the region rather than further quantity expansions.
- Stronger focus on mid-level skills development through vocational and technical training is indispensible for the industrialisation process. Development of formal apprenticeship programmes, drawing on lessons from countries such as Switzerland, might be considered for Myanmar.

Infrastructure accumulation and improvement will also be essential to sustain growth and to ensure that its benefits are more equally shared among population segments and regions. Myanmar's infrastructure – its transport networks, energy infrastructure and telecommunications systems – is in dire need of upgrading and expansion. Major projects are underway or planned to upgrade transport systems and enable the country to fulfil its potential of becoming a major trading route in the region. The country's energy resources are vast but the energy generation and distribution infrastructure

is presently insufficient to meet the country's needs. Limited telecommunications coverage and quality is a barrier to the host of opportunities that internet and mobile technology can open up. Creation of more infrastructure alone, however, will not be sufficient; improvement in the capacities for planning, implementing, and financing infrastructure projects will be equally important.

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Multi-dimensional Review of Myanmar

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