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Table of contents

Basic statistics of India 9

Acronyms 11

Executive summary 13

Assessment and recommendations 17
- Strong growth has raised incomes and reduced poverty but inequalities remain 18
- India is growing fast, but private investment is weak 21
- Monetary, financial and fiscal policies to set the foundation for stronger growth 27
- A comprehensive tax reform to promote inclusive growth 38
- Promoting stronger and more inclusive growth 42
- Achieving strong and balanced regional development 59
- Bibliography 65

Annex. **Follow-up to previous OECD policy recommendations** 69

Thematic chapters

Chapter 1. **Making income and property taxes more growth-friendly and redistributive** 75
- Main characteristics of the tax system 76
- The personal income tax could raise more revenue and redistribute more 81
- Social security contributions penalise job creation in the formal sector 87
- Property taxes could help finance better municipal services 88
- Company taxation: cutting rates and broadening the base to boost firm growth and job creation 89
- There is scope to improve the effectiveness of the tax administration and increase compliance 100
  - *Recommendations for reforming income and property taxes* 104
- Bibliography 105

Chapter 2. **Achieving strong and balanced regional development** 107
- Introduction and main findings 108
- Spatial inequalities are large 109
- Output inequality across states: drivers and policies to address them 113
- Making the most out of the urbanisation process 130
  - *Recommendations for achieving strong and balanced regional development* 136
- Bibliography 137

Annex A. **Spatial inequalities: across states or between rural and urban areas?** 141

Boxes

1. Removing high-denomination currency notes – "Demonetisation" 22
2. The Goods and Service Tax (GST) 26
3. India's public debt: is it sustainable? 35
4. The draft FY 2017/18 central government Budget and related reforms 36
5. Reforming the electricity sector: the UDAY plan and its likely impacts 45
6. Green growth challenges 63

1.1. The Goods and Service Tax (GST) bill 78
1.2. The allocation of taxing powers across levels of government in India 80
1.3. Options for raising more personal income tax revenue 85
1.4. The Hindu Undivided Family 86
1.5. Taxing immovable property - lessons from the literature and from other countries 89
1.6. Special Economic Zones in India 93
1.7. Tax rate calculations for resident and non-resident corporations 97
1.8. A comprehensive package of measures to address BEPS 99
1.9. Key recommendations of the Tax Administration Review Commission (TARC) . . 103
2.1. Understanding differences in GDP per capita across countries and states 114
2.2. Minimum support prices and tariff/border measures for agricultural products . . 118
2.3. Organised versus unorganised manufacturing sectors: definition and contribution to job and value added creation 121
2.4. The move to a more co-operative and competitive federalism framework 123
2.5. Rajasthan: recent policy reforms to promote economic development 124
2.6. India has pioneered urban planning: the city of Chandigarh 134
2.7. Recent initiatives to improve urban infrastructure in India 135

Tables

1. Macroeconomic indicators and projections 25
2. Shocks that could alter economic performance 26
3. Key public finance data for combined central government and states 35
4. Past OECD recommendations on the monetary, financial and fiscal policy frameworks 38
5. Tax revenue: level and mix 39
6. Past OECD recommendations on corporate income tax 41
7. Past OECD recommendations on infrastructure and land 47
8. Past OECD recommendations on foreign direct investment 49
9. Past OECD recommendations on improving the business environment 49
10. Past OECD recommendations on labour regulations 52
11. Past OECD recommendations on education and training systems 55
12. Past OECD recommendations on programmes to better support the poor and vulnerable 59

1.1. Tax revenue: level and mix 79
1.2. Reform options for raising more personal income tax revenue: 4 scenarios . . 85
1.3. The average tax wedge decreases along the income ladder in India 87
1.4. Major incentives granted to companies under the central government income tax 91
1.5. Tax depreciation rates and true economic depreciation rates for selected assets in India 92

1.6. Calculation of the effective statutory tax rate for a resident *versus* a non-resident corporation . . . 97
1.7. FDI inflows to India . . . 100
2.1. Agricultural households: size of land holdings, income, investment and indebtedness . . . 119
A.1. Percentage of inequality explained by disparities across states and the urban/rural divide . . . 142

Figures

1. Growth has been strong and poverty has declined . . . 19
2. Regional disparities are large and urban population is increasing fast . . . 20
3. Recent macroeconomic developments . . . 23
4. Financial vulnerabilities . . . 24
5. Monetary policy: recent actions and outcomes . . . 28
6. Challenges in the banking sector . . . 30
7. Stock and bond market capitalisation . . . 31
8. International comparisons for fiscal outcomes . . . 33
9. Fiscal outcomes for the central government and the states . . . 34
10. Public debt to GDP ratio under four stylized scenarios . . . 35
11. The marginal income tax rates kick in at high income levels . . . 39
12. The combined statutory tax rate on international dividends payments is high, 2012 . . . 41
13. The investment rate has fallen . . . 42
14. Infrastructure should improve: the case of electricity . . . 44
15. Registering property takes time and is costly . . . 46
16. FDI: regulatory restrictiveness and inflows . . . 48
17. Too few jobs are created . . . 50
18. Employment protection legislation is stringent . . . 51
19. Too low literacy rate and public spending on education to reap the demographic dividend . . . 54
20. Financial and human resources in the health care sector . . . 56
21. Impact of individual characteristics on financial inclusion in India and other BRIICS . . . 58
22. Spatial disparities are large . . . 60
23. Low productivity in the agricultural sector . . . 61
24. Air pollution in cities . . . 62
25. Green growth indicators for India . . . 63
1.1. Tax revenue is low . . . 77
1.2. The tax mix: indirect taxes and states' own taxes account for a large share . . . 78
1.3. The personal income tax raises little revenue . . . 82
1.4. The personal income tax has little redistributive impact . . . 83
1.5. Corporate income tax: high statutory rate and many distortions . . . 90
1.6. International aspects for the corporate income tax . . . 96
1.7. Unfinalised tax disputes in India, BRIICS and OECD countries . . . 101
1.8. Tax administration capacity in India is comparatively low . . . 102
2.1. Income inequality across states is large . . . 109
2.2. There is little evidence of catching up of lagging states . . . 110
2.3. The rural/urban income divide is large . . . 111

2.4. Access to public services: the rural/urban divide 112
2.5. Gaps in GDP per capita across states are largely due to productivity differences. 115
2.6. Explaining growth pattern across states over the period 2000-01 to 2011-12 . . 116
2.7. Agriculture: a key factor behind income dispersion across states 117
2.2. Prices of key agricultural products 118
2.3. Firms, employment, value added and productivity in organised and unorganised manufacturing. 121
2.10. Tax and spending autonomy of the states: India compared with 13 other federations 122
2.11. The quality of physical and social infrastructure varies significantly across states 126
2.12. Product market indicators and states' performance 128
2.13. Indian firms tend to be small 129
2.14. Some states do better than others in allocating resources across firms from the organised sector. 129
2.15. The urbanisation process will accelerate 130
2.16. Potential urbanisation gains are not fully exploited. 132
2.17. Urbanisation challenges: infrastructure shortages and local air pollution 133

This Survey was prepared in the Economics Department by Isabelle Joumard, under the supervision of Piritta Sorsa. Statistical research assistance was provided by Hermes Morgavi with general administrative assistance provided by Anthony Bolton and Brigitte Beyeler. The Survey also benefitted from contributions at different stages by Hugo Bourrousse, Jean-Marc Fournier; Daniela Glocker, Peter Hoeller, Paul O'Brien, Urban Sila and Alastair Thomas.

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Basic statistics of India, 2015 or latest year available

(Numbers in parentheses refer to the OECD average)[1]

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	1 283		Population density per km²	431,5	(36,6)
Under 15 (%)	28,8	(18,3)	Life expectancy (years)	68,0	(80,5)
Over 65 (%)	5,6	(13,6)	Men	66,6	(77,8)
Latest 5-year average growth (%)	1,6	(0,6)	Women	69,5	(83,1)
			Latest general election	May	2014

ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	7 454		Primary sector (2014)	17,6	(2,5)
In current prices (billion INR)	132 549		Industry including construction (2014)	29,7	(26,4)
Latest 5-year average real growth (%)	6,8	(1,7)	Services (2014)	51,6	(71,1)
Per capita (000 USD PPP)	5,9	(39,2)			

GENERAL GOVERNMENT Per cent of GDP					
Expenditure	27,2	(42,2)	Gross financial debt	67,4	(115,9)
Revenue	19,8	(38,5)			

EXTERNAL ACCOUNTS					
Exchange rate INR per USD	64,16		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	17,12		Mineral Products	21,9	
In per cent of GDP			Stones, Pearls, Precious Metals, Jewellery	14,0	
Exports of goods and services	20,5	(28,9)	Textiles	11,9	
Imports of goods and services	23,2	(28,7)	Main imports (% of total merchandise imports)		
Current account balance	-1,10	(0,1)	Mineral Products	42,4	
Net international investment position	-38,5		Machinery / Electrical	13,3	
			Stones, Pearls, Precious Metals, Jewellery	13,1	

LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate for 15+ year-olds (2014, %)	52,2	(55,2)	Unemployment rate, (age 15 and over) (2012, %)	3,6	(8,0)
Men	77,2	(63,9)	Youth (age 15-24, %)	10,7	(17,1)
Women	26,0	(47,1)	Long-term unemployed (1 year and over, %) (2010)	38,2	(29,3)
Participation rate for 15+ year-olds (2014, %)	54,2	(59,6)	Gross domestic expenditure on R&D (2011, % of GDP)	0,8	(2,4)

ENVIRONMENT					
Total primary energy supply per capita (toe)	0,6	(4,2)	CO_2 emissions from fuel combustion per capita (tonnes)	1,5	(9,5)
Renewables (%)	25,3	(9,4)	Water abstractions per capita (2014, m^3)	761	(819)
Fine particulate matter concentration ($PM_{2.5}$, $\mu g/m^3$)	46,7	(14,0)			

SOCIETY					
Absolute poverty rate (2011, %)	21,9		Public and private spending (% of GDP)		
Ratio of incomes of the top 10% vs. bottom 10% (2011)[2]	8,4	(11,2)	Health care, current expenditure, 2014	4,7	(9,2)
Ratio of incomes of the top 10% vs. bottom 10% (2011)[2]	8,4	(9,6)	Pensions	0,7	(8,7)
Share of women in parliament (%)	12,0	(28,6)	Total government spending in education, 2014	3,8	(5,2)

Better life index: www.oecdbetterlifeindex.org

1. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.
2. For India, this is calculated in terms of monthly per capita consumption.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union

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Acronyms

AAR	Authority for Advance Rulings
APA	Advance pricing agreement
ASI	Annual Survey of Industries
BEPS	Base erosion profit sharing
BRIICS	Brazil, Russia, India, Indonesia, China, South Africa.
CBEC	Central Board of Excise and Customs
CBDT	Central Board of Direct Taxes
CFC	Controlled foreign company
CIT	Corporate income tax
DBT	Direct benefit transfer
DDT	Dividend distribution tax
DFC	Dedicated Freight Corridor
DTC	Direct Tax Code
EME	Emerging market economy
EPL	Employment protection legislation
EPZ	Export Processing Zone
FDI	Foreign direct investment
FRBMA	Fiscal Responsibility and Budget Management Act
FY	Fiscal year
GDP	Gross domestic product
GST	Goods and Services Tax
HUF	Hindu Undivided Family
ICT	Information and communication technology
INR	Indian Rupee
IT	Information technology
NPL	Non-performing loan
MAT	Minimum alternate tax
MNE	Multinational enterprise
MPI	Multidimensional Poverty Index
MSP	Minimum Support Price
NAM	National Agriculture Market
NEET	Not in employment, education or training
NSSO	National Sample Survey Office
PAN	Permanent Account Number
PIT	Personal income tax
PMR	Product market regulations
PSL	Priority Sector Lending
R&D	Research and development
RBI	Reserve Bank of India
SEZ	Special economic zone
SME	Small and medium-sized enterprise
SLR	Statutory Liquidity Ratio
TARC	Tax Administration Review Commission
USD	United States dollar
VAT	Value added tax

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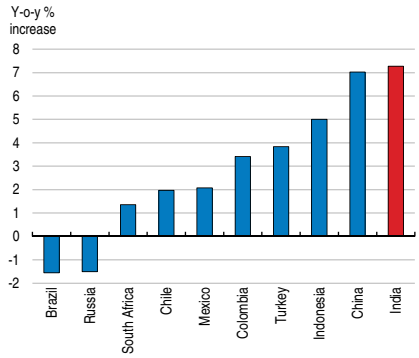
Executive summary

- *Growth has been strong*
- *Tax reform could make growth more inclusive*
- *Policy reforms at the state and municipal levels could boost productivity and reduce spatial disparities*

Growth has been strong

Annualised average increase 2014-2016Q3



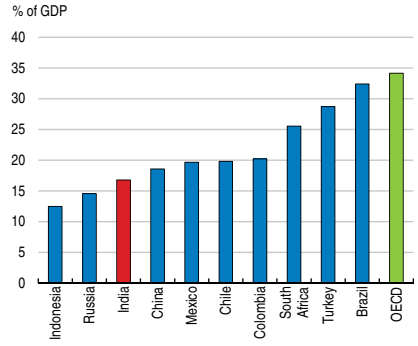
Source: Central Statistics Organisation; and OECD Economic Outlook 100 database.

StatLink http://dx.doi.org/10.1787/888933453250

Economic growth of around 7½% makes India the fastest-growing G20 economy. The acceleration of structural reforms, the move towards a rule-based policy framework and low commodity prices have provided a strong growth impetus. Recent deregulation measures and efforts to improve the ease of doing business have boosted foreign investment. Investment is still held back by the relatively high corporate income tax rates, a slow land acquisition process, regulations which remain stringent in some areas, weak corporate balance sheets, high non-performing loans which weigh on banks' lending, and infrastructure bottlenecks. Quality job creation has been low, held back by complex labour laws.

Tax reform could make growth more inclusive

Tax revenue, 2015 or latest year available



Note: Tax revenue includes social security contributions.

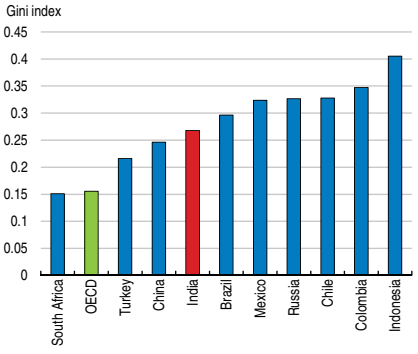
Source: OECD Economic Outlook 100 database; OECD Revenue Statistics database; World Bank; Reserve Bank of India; Central Statistics Organisation.

StatLink http://dx.doi.org/10.1787/888933453263

A comprehensive tax reform would promote inclusive growth. Timely and effective implementation of the Goods and Services Tax would support competitiveness, investment and economic growth. Government's plans to reduce the corporate income tax rate and broaden the base will serve the same objectives. These two on-going reforms have been designed to be revenue-neutral while India needs to raise additional tax revenue to meet social and physical infrastructure needs. Property and personal income taxes, which are paid by very few people, could be reformed to raise more revenue, promote social justice and empower sub-national governments to better respond to local needs. Ensuring clarity and certainty in tax legislation and employing more skilled tax officers would strengthen the tax administration and make the system fairer and more effective.

Policy reforms at the state and municipal levels could boost productivity and reduce spatial disparities

Inequality in GDP per capita across regions, 2013 or latest year available



Source: OECD Regional Database.

StatLink http://dx.doi.org/10.1787/888933453279

Spatial disparities in living standards are large. India is reforming relations across levels of government to empower the states and make policies more responsive to local conditions. Some states have taken the lead in improving the ease of doing business and now enjoy higher productivity and income. Additional efforts to showcase reform efforts at the state level and identify best practices will support the reform process and help achieve better and balanced regional development. In rural areas, poverty rates are high and access to core public services is often poor. Farm productivity is low owing to small and fragmented land holdings, poor input management, and inefficient market conditions. In urban areas, agglomeration benefits are quickly reduced by congestion costs, in particular air pollution and long commuting times, all of which reduce well-being.

MAIN FINDINGS	KEY RECOMMENDATIONS
Strengthening macroeconomic resilience and growth	
Despite fiscal consolidation at the central government level and strong economic growth, the government debt to GDP ratio has increased. Spending needs on key physical and social infrastructure are not fully met.	• Ensure that government debt to GDP returns to a declining path. • Increase public spending on physical and social infrastructure and gradually extend the subsidy reform to other products, including fertilisers and food. • Raise more revenue, especially from property and personal income taxes.
Thanks to prudent monetary policy, inflation has declined but monetary policy transmission has been slow and incomplete, partly reflecting large non-performing loans and regulations imposed on banks.	• Strengthen public bank balance sheets by recapitalising them, promoting bank consolidation and lowering the 51% threshold below which the government share cannot fall. • Gradually reduce the obligations imposed on banks to hold public bonds and lend to priority sectors. • Monetary policy should continue to be prudent.
Job creation in the organised sector has been sluggish. Female participation is low and many young people are out of work and not in education or training. Labour regulations are complex and become more stringent as companies employ more workers. A large number of workers, particularly in the unorganised (informal) sector, are not covered by core labour laws and social insurance programmes.	• Introduce a simpler and more flexible labour law which removes disincentives for firms to create jobs. • Continue improving access to education and provide better and earlier vocational training. • Foster competition among states in the ease of creating jobs. Produce timely data on employment to help design better policies.
The well-being of people and corporate investment are held back by infrastructure bottlenecks, in particular in electricity provision and water sanitation.	• Upgrade electricity and water infrastructure and provide access to all. • Set energy and water prices high enough to cover economic costs for investors, replacing subsidies by better targeted household financial support.
Implementing a comprehensive tax reform to boost inclusive growth	
The tax-to-GDP ratio is low and the tax system has little redistributive impact. Few people pay income taxes and property taxes are low. Meeting social and development needs will require raising more revenue from property and personal income taxes.	• Remove the tax expenditures that benefit the rich most and freeze the income thresholds from which rates apply. • Enable municipalities to raise more real estate taxes.
High corporate income tax rates and a narrow base distort the allocation of resources, discourage foreign investment and make tax evasion and avoidance more attractive. Tax disputes are frequent and long to resolve. Staff numbers and training levels are low in the tax administration.	• Implement the gradual reduction in the corporate income tax from 30% to 25% while broadening the tax base. • Provide certainty regarding tax rules and their implementation. • Increase the number and training of staff employed in the tax administration.
Achieving a strong and balanced regional development	
Poverty in rural areas is high, particularly among marginal farmers and landless labourers and many farmers operate on very small land plots.	• Enable reforms in land ownership laws, improve the land registry and step up the digitisation of land records. • Improve infrastructure to provide non-farm activities greater push both in rural and urban areas. • Continue efforts to improve access to core public services for all.
Inequality in productivity, consumption and access to public services across states is large. States that have low regulatory and administrative barriers perform better.	• Continue the benchmarking of states and strengthen the sharing of best practices, in particular on labour regulations and land laws.
Urban population will increase fast. Urban citizens suffer from poor urban infrastructure, transport congestion and air pollution.	• Give municipalities more and clearer spending and taxing powers. • Rely more on road pricing and parking fees to increase municipal revenue, restrain private car usage and reduce pollution.

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Assessment and recommendations

- *Strong growth has raised incomes and reduced poverty but inequalities remain*
- *India is growing fast, but private investment is weak*
- *Monetary, financial and fiscal policies to set the foundation for stronger growth*
- *A comprehensive tax reform to promote inclusive growth*
- *Promoting stronger and more inclusive growth*
- *Achieving strong and balanced regional development*

Strong growth has raised incomes and reduced poverty but inequalities remain

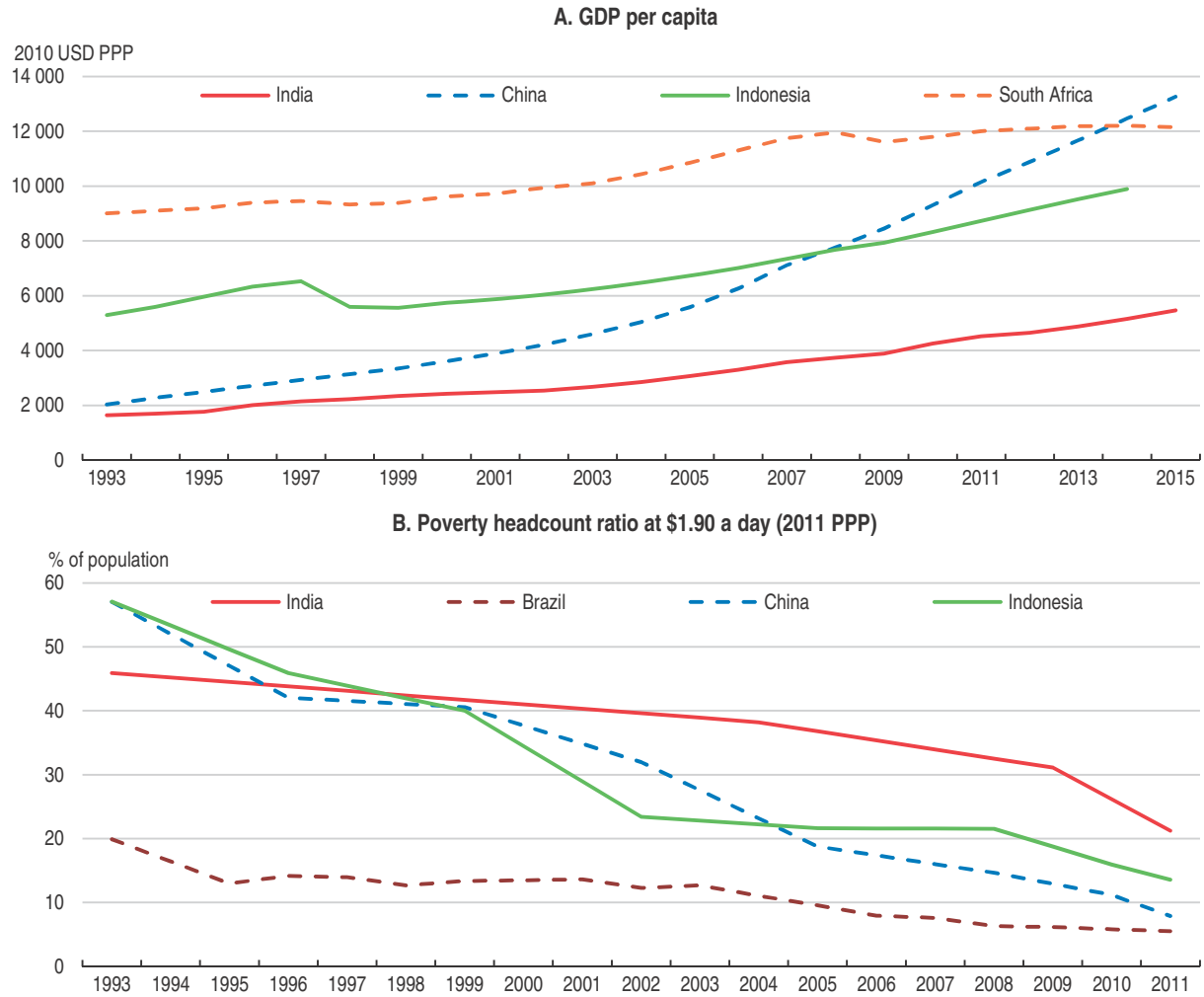
Strong growth since the mid-1990s has raised GDP per capita by over 5% per year (Figure 1.A). The acceleration of structural reforms since 2014 and the move towards a rule-based policy framework have brought a new growth impetus and improved the outlook:

- The reaffirmation of fiscal rules and the implementation of inflation targeting have improved predictability of macroeconomic policy and policy outcomes.
- Licenses for oil, gas fields and coal mines have been auctioned under clear rules, thus ending the practice of discretionary allocation.
- In the context of the Make in India initiative, foreign direct investment (FDI) rules have been changed, reducing the share of FDI inflows requiring government approval.
- The simplification of administrative requirements, the scrapping of obsolete laws, the modernisation of bankruptcy laws, the removal of specific tax reliefs and greater reliance on e-government are improving the ease of doing business and reducing administrative delays, uncertainty and corruption.
- Discretionary and earmarked grants from the central government to the states have largely been replaced by a higher tax share, empowering the states to experiment and tailor policies to local needs. A ranking system for the states on the ease of doing business has been introduced.
- The implementation of a goods and services tax (GST), to replace a myriad of consumption taxes, could be a game-changer over the medium-run: it will help make India a common market and promote investment, productivity and competitiveness.

The pace of reform is quite remarkable given the complexity of the federal structure of government and the diversity in terms of culture, languages, geography and level of development across the country.

Growth has also become more inclusive as about 140 million people have been taken out of poverty in less than 10 years (Figure 1.B). India has relied on large welfare programmes including price-support for food, energy and fertilisers and has the world's largest programme guaranteeing the "right to work" in rural areas. The on-going reform of these schemes towards better targeting of those in need, reducing administrative costs and corruption, and supporting financial inclusion could serve as best practice for many emerging economies. However, many Indians still lack access to core public services, such as electricity and sanitation. Public spending on health care, at slightly more than 1% of GDP, is low (OECD, 2014). Although almost all children have access to primary education, the quality is uneven. Female labour force participation remains low (OECD, 2014). However, some other indicators of gender equality have improved, such as female life expectancy at birth (which is now greater than that of men) and participation in education. Deprivation is pronounced in rural areas and urban slums although some states have performed better to reduce poverty.

Figure 1. **Growth has been strong and poverty has declined**



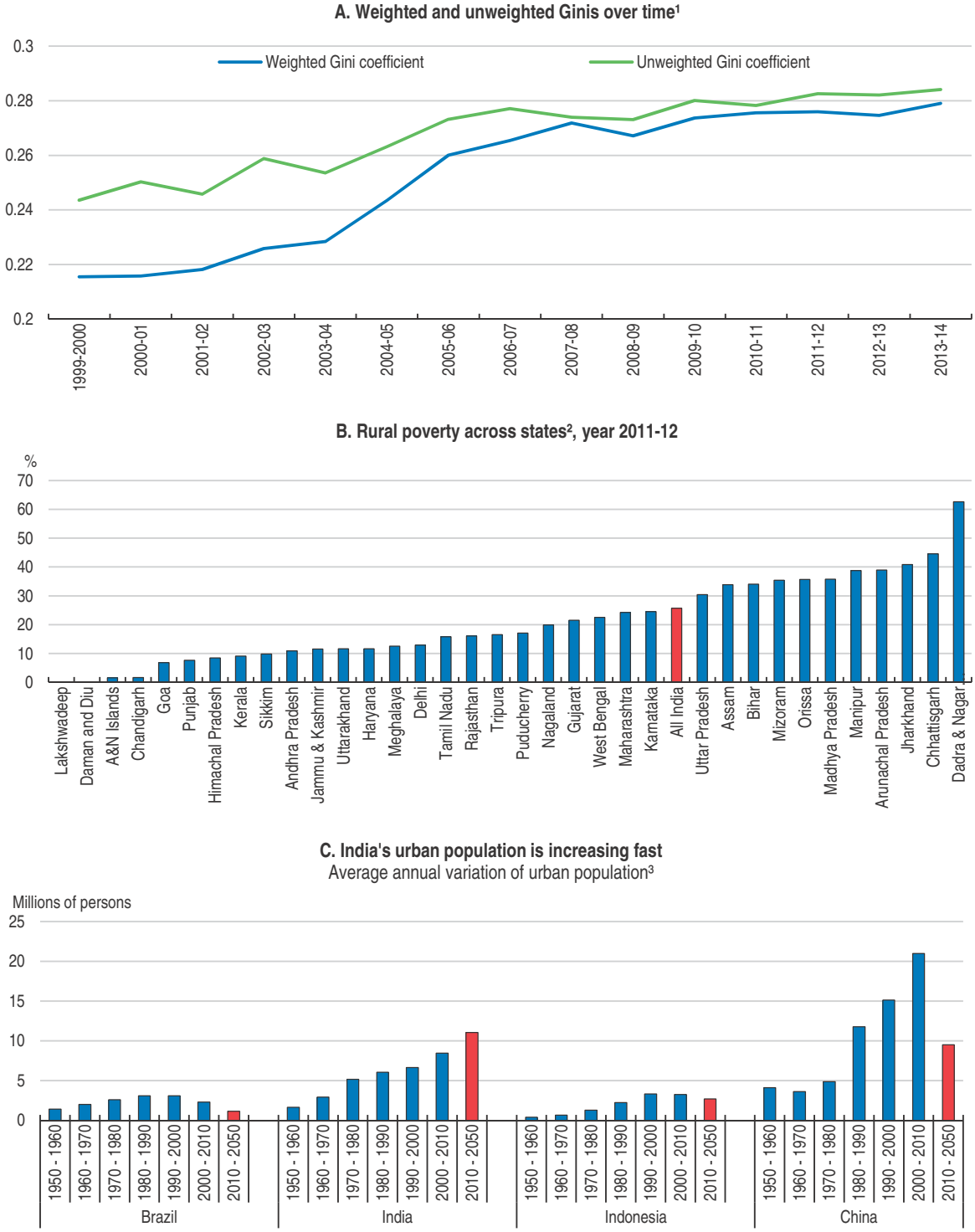
Source: OECD Economic Outlook 100 database; Central Statistics Office; World Bank World Development Indicators database.

StatLink http://dx.doi.org/10.1787/888933453285

A comprehensive tax reform should help to raise more revenue to finance much needed social and physical infrastructure, promote corporate investment, enable more effective redistribution and strengthen the ability of states and municipalities to better respond to local needs. The implementation of the landmark GST reform will contribute to make India a single market. By reducing tax cascading, it will boost India's competitiveness, investment and job creation. The GST reform is designed to be initially revenue-neutral. It should be complemented by a reform of income and property taxes (Chapter 1).

Achieving strong and balanced regional development is also key to promote inclusive growth. Inequality in income and in access to core public services between states and between rural and urban areas is large (Figure 2). Recent changes in India's federalism model have given states more freedom and incentives to modernise regulations and tailor their public policies to local circumstances. Evidence regarding experimentation at the sub-national government level is rich and can serve to identify best practices (Chapter 2). Ranking states on the ease of doing business is opening a new era of structural reforms at

Figure 2. **Regional disparities are large and urban population is increasing fast**



1. The population data are from Census 2001 and 2011. For the other years, population was estimated by linear interpolation and extrapolation.
2. Poverty is calculated by using the Tendulkar methodology, which expresses the poverty line in terms of monthly per capita consumption expenditure based on a mixed reference period.
3. Forecasted data are shown in red.

Source: Reserve Bank of India; Central Statistics Office; NSSO; and United Nations, Department of Economic and Social Affairs, Population Division (2014).

StatLink http://dx.doi.org/10.1787/888933453299

the state level and will help unleash India's growth potential. Raising living standards in poorer states would also require increasing productivity in the agricultural sector. As employment in the agricultural sector declines, urbanisation will gather pace. However, exploiting cities' potential for job creation, productivity gains and improving the quality of life would demand better urban infrastructure.

Overcoming remaining structural bottlenecks would help maintain rapid growth and make it more inclusive. One of the key challenges is to create more and better jobs for the 1 million people entering the labour force every month. Less than 10% of the workers are covered by social insurance and labour laws and job creation in the formal sector has been slow over the past decade. Demographics will favour labour force growth up to 2040, as the population is relatively young and the labour market participation of women is still low. Furthermore, existing and new labour resources should gradually shift from the low-productivity agricultural sector and small/unorganised activities to the more productive manufacturing and service sectors. Meeting the aspiration of the growing labour force and reducing inequality arising from the labour market would require modernising labour laws and investing in skills.

Against this backdrop, the main messages of this *OECD Economic Survey of India* are:

- Prosperity is rising quickly, but growth has not been sufficiently inclusive on a number of dimensions, as reflected in a still high poverty rate.
- Comprehensive tax reform, building up on the recently passed Goods and Services Tax, would lift all boats.
- Reducing the wide dispersion in living conditions across states and between urban and rural areas call for higher agricultural productivity, improved urban infrastructure, and liberalised product and labour markets.

India is growing fast, but private investment is weak

Economic growth has recovered since 2014 and India has become the fastest-growing G20 economy, with annual growth rates around 7.5% (Figure 3.A). Private consumption in urban areas has been buoyed by prospects of higher public wages and pensions while government investment and consumption remained strong. The return to a normal monsoon in 2016, after two consecutive years of bad weather, is supporting a recovery in agricultural income and rural consumption. The demonetisation has impacted consumption and other macroeconomic parameters, at least temporarily (Box 1). Despite sustained public investment, total investment declined in real terms in the first half of 2016 (Figure 3.C). Exports fell in the second half of 2014 and 2015 as external demand was weak and the real effective exchange rate appreciated. The hike in excise duties on precious metals, combined with the drop in demand from oil exporting countries, also hurt jewellery exports which account for 15% of total merchandise exports. However, exports bounced back early in 2016 and export orders are growing.

Robust growth has been accompanied by a rapid decline in inflation and the current account deficit. As net commodity importer, India has benefitted significantly from the fall in commodity prices, which has lowered pressures on inflation, on the current account deficit and on public spending *via* lower subsidies. Inflation pressures have been further contained by lower increases in minimum support prices *vis-à-vis* the past, the active management of food stocks to avoid spikes in food prices, still low capacity utilisation in the industrial sector, and the change in monetary policy framework aimed at anchoring

Box 1. **Removing high-denomination currency notes – "Demonetisation"**

On November 8th 2016, the Prime Minister announced that existing INR 500 and 1000 notes (about USD 7.5 and 15 respectively) would cease to be legal tender on the same day. About 86% of the total value of notes in circulation were thus "demonetised". However, persons holding notes were allowed to deposit these notes in their bank or post office accounts up to December 30th.

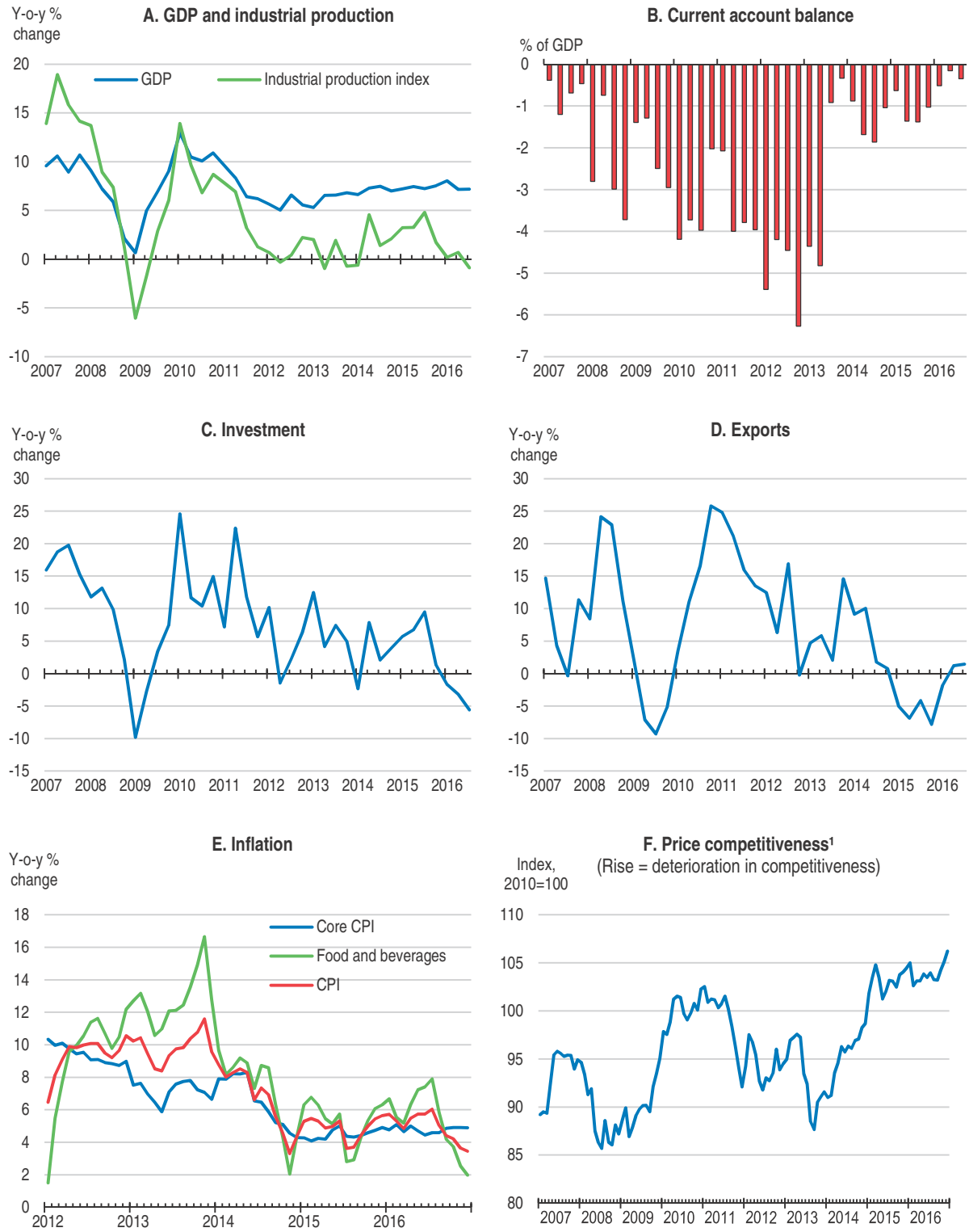
"Demonetisation" complements the many initiatives recently taken by the government to fight against corruption and the so-called "black money" and to reduce tax evasion. These include: agreements with many countries to share bank information; a 2016 law to curb *benami* transactions (i.e. properties purchased in the name of others) often used to deploy black money earned through corruption; and the scheme introduced for declaring black money after paying a penalty (tax amnesty for undisclosed income and assets).

Implementing the demonetisation has had transitory and short-term costs but should have long-term benefits. The temporary cash shortage and wealth destruction, as fake currency and part of the illegal cash will not be redeemed, have affected in particular private consumption. In the event, most institutions (including the OECD and RBI) have revised down growth projections for FY 2016-17 and FY 2017-18. The shift towards a less cash economy and formalisation should however improve the financing of the economy and availability of loans (as a result of the shift from cash to bank deposits) and should promote tax compliance.

inflation expectations. The decline in merchandise imports - reflecting weak (import intensive) business investment, lower demand for gold and large terms of trade gains - has contributed to keeping the current account deficit below 2% of GDP. Net foreign direct investment has rebounded and will likely more than fully finance the current account deficit in 2016.

The investment to GDP ratio has been on a downward trend for some years. Recently, low capacity utilisation and the weak financial position of some corporations have damped corporate investment. Several factors have added to these cyclical factors. First, the banking system has been weakened by poorly performing public banks, which suffer from high non-performing loans (see below). Banks also labour under the Statutory Liquidity Ratio, which requires them to hold the equivalent of 21.5% of their deposits in government securities. This reduces government funding costs, but distorts financial markets and limits lending to the private sector. Alternatives to bank funding, in particular a corporate bond market, are underdeveloped in India. Second, infrastructure bottlenecks (e.g. frequent power outages) coupled with the often long land acquisition process, have held back investment, in particular in the manufacturing sector (OECD, 2014). Third, taxation is an issue, with relatively high corporate income tax rates combined with frequent and lengthy tax disputes (Chapter 1). Fourth, the government has substantially deregulated foreign direct investment (FDI) in several sectors over the past two years. FDI inflows (foreign residents' net buying and selling in India) have increased from USD 31 billion in financial year (FY) 2013-14 to USD 45 billion in FY 2015-16 as revealed by the Reserve Bank of India. However, restrictions on FDI were relatively stringent in 2016 compared to other BRIICS and OECD countries. Overall, chronically low investment, were it to continue, would eventually result in weaker productivity and growth.

Figure 3. **Recent macroeconomic developments**



1. Real effective exchange rates based on consumer prices. Differences in productivity gains are not reflected.

Source: OECD Economic Outlook 100 database; and Reserve Bank of India.

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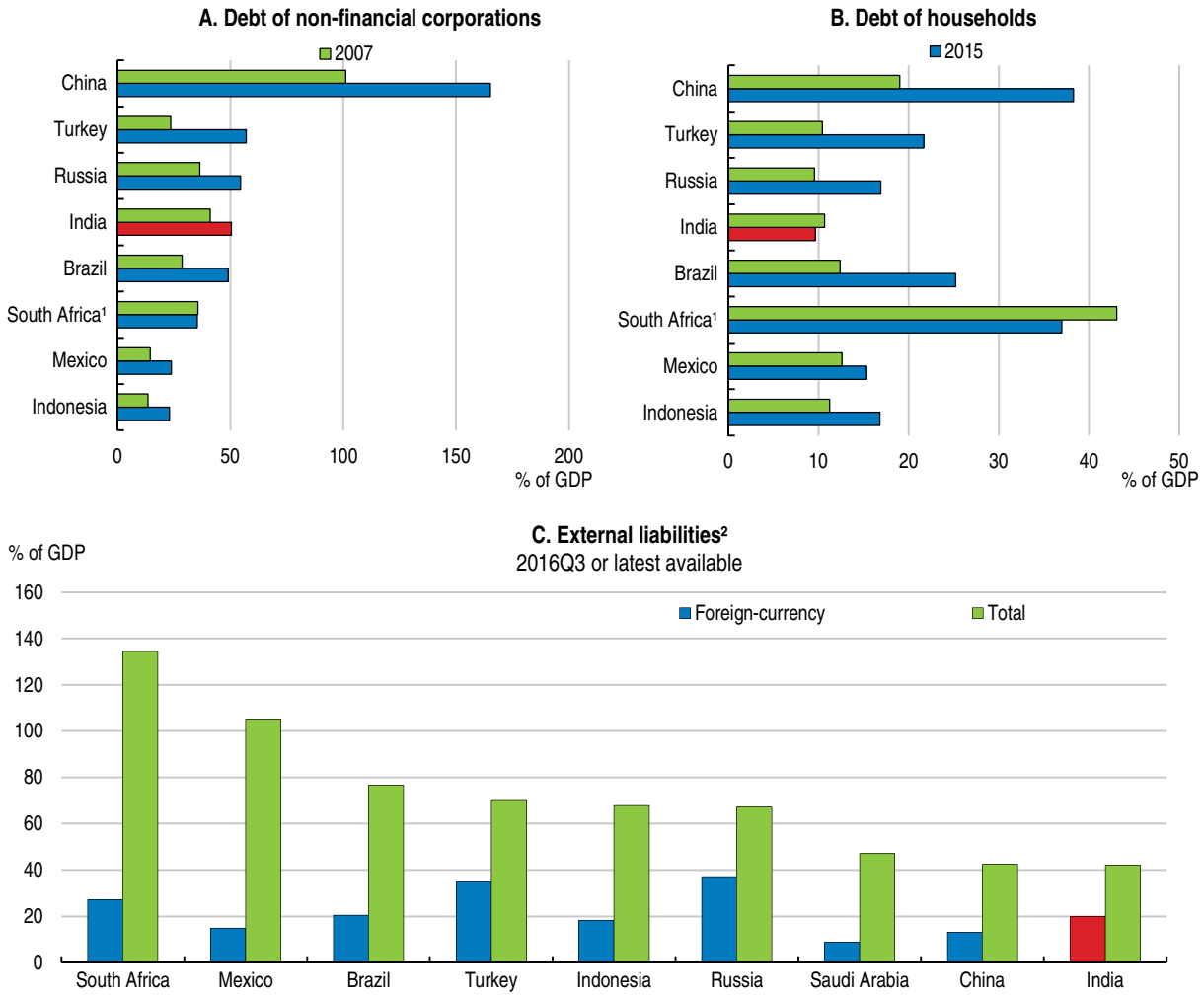
India's exposure to changes in global financial and trade conditions is relatively low. Household borrowing has increased, partly reflecting financial deepening, and has underpinned private consumption and the construction sector. Household debt is only 9% of GDP (Figure 4). The debt of non-financial corporations in relation to GDP is also relatively low but is highly concentrated in a few sectors (including infrastructure). Some corporations are highly leveraged (in particular in iron and steel, construction, and power sectors) and face difficulty in servicing debt. On the external side, the current account deficit has declined considerably, arising in part from a decline in oil prices and lower imports of capital goods and gold. India's external liabilities are lower than in many EMEs, although a large share is denominated in foreign currency, and foreign exchange reserves have been replenished after the attack on the rupee in 2013.

Growth is projected to remain strong. The gradual implementation of the recommendations of the 7th Pay Commission will raise public wages and pensions by an estimated 16% to 23%. This is expected to continue to support consumption (Table 1).

Figure 4. **Financial vulnerabilities**



1. Data for South Africa refer to 2008 instead of 2007.
2. Foreign-currency external liabilities are approximated by the sum of a positive difference between debt securities issued by nationals and residents from the BIS debt securities database (a proxy for off-shore external bond liabilities) and external liabilities for financial derivatives and other investments (the latter includes bank loans) from the IMF international investment position database.

Source: Bank for International Settlements; and OECD calculations.

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Table 1. **Macroeconomic indicators and projections**

Annual percentage changes

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Real GDP[1]	6.6	7.2	7.6	7.0	7.3	7.7
Consumer price index (CPI)	9.4	5.8	4.9	4.8	5.0	4.6
Wholesale price index (WPI)	6.0	2.0	-2.5	2.8	4.0	4.2
Reserve Bank repo rate	7.6	7.9	7.0	6.4	5.9	5.6
10-year government bond rate	8.4	8.3	7.8	7.1	6.5	6.3
Fiscal balance (per cent of GDP)[2]	-6.7	-6.5	-7.2	-7.0	-6.7	-6.4
Current account balance (per cent of GDP)	-1.7	-1.3	-1.1	-0.8	-0.9	-0.9
Private final consumption expenditure	6.8	6.2	7.4	7.0	7.8	7.6
Government final consumption expenditure	0.4	12.8	2.2	8.3	4.9	6.8
Gross fixed capital formation	3.4	4.9	3.9	0.4	4.3	7.3
Total domestic expenditure	2.0	6.9	8.0	5.4	7.5	7.9
Exports of goods and services, National Accounts basis	7.8	1.7	-5.2	4.5	4.6	5.2
Imports of goods and services, National Accounts basis	-8.2	0.8	-2.8	-2.3	5.4	6.3
Net exports, contribution to growth of real GDP	4.5	0.2	-0.5	1.5	-0.2	-0.2

Note: Data refer to fiscal year starting in April. The projections shown here are based on the OECD Economic Outlook 100 and include more recent information.

1. GDP is measured at market prices, which is GDP measured at factor costs plus indirect taxes less subsidies.
2. Loans from the central government and the states to other public bodies are included.

Source: OECD projection based on OECD Economic Outlook 100 database.

Private investment will pick up to some extent as excess capacity diminishes, deleveraging by corporates and banks continues and infrastructure projects mature. Inflation is projected to continue to decline, as the effectiveness and credibility of monetary policy strengthen and better weather conditions reduce pressures from food inflation. The gradual recovery in (import-intensive) corporate investment and lower remittance flows will weigh on the current account deficit. Robust FDI inflows should however mitigate India's external vulnerability. The implementation of the Goods and Service Tax (GST, Box 2), from FY 2017-18 according to government plan, will support investment and competitiveness over the medium-term, raising GDP growth by 0.5 to 2 percentage points according to estimates (NCAER, 2009; Government of India, 2015c) even though it may have short-term adverse effects on inflation and consumption.

India faces risks, some of which are hard to quantify (Table 2). Further structural reform is a clear upside risk for growth. Some states (including Maharashtra, Madhya Pradesh and Rajasthan) have taken the lead in reforming land and labour market regulations but it is still unclear whether others will follow up. There are also downside risks. Although the government is hopeful, rolling out the GST by April 2017 is an ambitious objective. Any slippage would risk delaying the investment recovery. The increase in public wages entails a risk for inflation, although this risk is limited given the small share of employees in the public administration in total employment (less than 2%) and the fact that implementation at the state level can be expected to be spread over some time. Risks to the banking sector remain elevated due to continuous deterioration in asset quality, low profitability and liquidity (RBI, 2016d). Slower efforts to clean up banks' balance sheets and recapitalise public banks would raise uncertainties and have bearing on investment. Some risks are interconnected. If the Reserve Bank of India increases interest rates to address the inflation risk, the sustainability of corporate debt could be affected. India is not immune to external shocks and fragilities in the global economy. An increase in commodity prices could raise inflation, dampen private consumption and weigh on both the current account and fiscal deficit. India's largest export market is the United States

Box 2. **The Goods and Service Tax (GST)**

Key objectives of the GST

The GST will replace various taxes on goods and services levied by the central government and states by a single tax on value added. It will thus reduce tax cascading, facilitate a common national market, encourage voluntary tax compliance, reduce tax collection costs, support investment and improve competitiveness. All taxpayer services, such as registration, returns and payments will be available online, which would make compliance easy and transparent.

The GST reform is intended to be revenue neutral although it may affect the allocation of revenue both across states and between states and the central government. However, the central government has committed to compensate states fully for any loss in revenue they suffer in the five years following the implementation of the GST.

Designing the GST

The GST Council has been constituted, with a two-thirds vote share for the states. It is responsible for recommending tax rates, exemptions, threshold limits and special provisions for certain states and devising the mechanism for resolving disputes.

A four-rate structure has been proposed: 6% on essential items; two standard rates at 12% and 18%; and a higher rate of 26% on luxury goods. A tax over and above 28% will be imposed on some luxury, sin and demerit goods (including sodas, tobacco and luxury cars). There will be about 100 items exempted (mainly food). Petroleum products, alcohol, electricity and real estate are excluded. Firms with a turnover of less than INR 2 million (about USD 30 000) will be exempted except in the North-eastern states where a lower exemption limit of INR 1 million will apply. The complex rate structure creates the possibility of mis-declaration to benefit from lower rates or exemptions.

Administrative control will be split between the central government and the states. States will assess 90% of the businesses with an annual turnover of INR 15 million or less (about USD 221 thousand) while the central government will assess the remaining 10%. States will assess 50% of the larger businesses, with the remaining 50% assessed by the central government.

Next steps to implement the GST

The government's objective is to introduce the GST from July 2017 as the existing system of indirect taxation is due to lapse in September 2017. The IT infrastructure is being developed and tax officers will have to be trained. Consultations, workshops and training sessions for the industry, traders, staff and all other stakeholders involved have begun.

(about 15% of merchandise exports) while China accounts for less than 4% of total merchandise exports. India's economic performance is more sensitive to weather conditions than many other emerging economies since the agricultural sector still accounts for about 18% of GDP and almost 50% of total employment.

Table 2. **Shocks that could alter economic performance**

Shock	Possible impacts
Financial turbulence	Highly-leveraged companies and public banks with large non-performing loans are exposed to major shocks emanating from domestic and foreign financial markets. Investment would suffer and recapitalisation needs would increase, with a negative impact on economic growth and the fiscal deficit.
Geopolitical risks	Tensions with neighbouring countries could escalate. It would affect consumer and business confidence and create pressures on public (military) spending.

Monetary, financial and fiscal policies to set the foundation for stronger growth

A successful monetary policy framework

A flexible inflation targeting policy was implemented in 2015, as recommended in the previous *OECD Economic Survey* (OECD, 2014). The 2015 Agreement on Monetary Policy Framework between the government and the Reserve Bank of India (RBI) defined the price stability objective explicitly in terms of the target for inflation – as measured by the consumer price index – in the near to medium term: below 6% by January 2016 and at 4% (+/- 2%) for the FY 2016-17 and all the subsequent years. The 2016 amended RBI Act specified that the government, in consultation with the RBI, will set the target level once every five years. Although the 4% inflation target is ambitious given the rather long history of high inflation, it is consistent with economic studies on the maximum rate of inflation non-detrimental to growth in India (Mohanty et al., 2011).

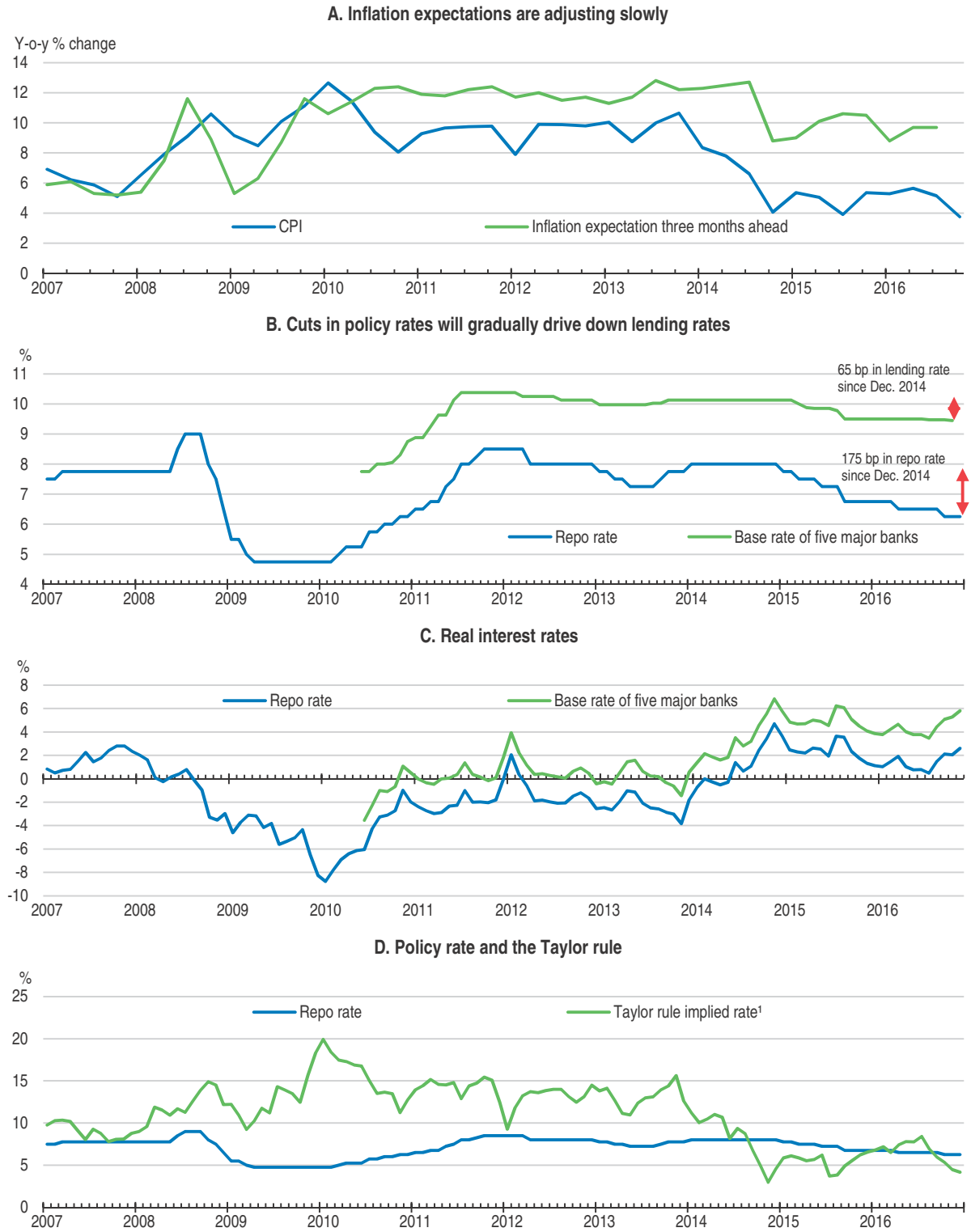
The framework has been strengthened by the creation, in 2016, of a Monetary Policy Committee vested with monetary policy decision-making, which increases the operational independence of the RBI. The Committee is made up of the RBI governor, two others from the central bank and three representatives from the government, appointed for 4 years. The RBI governor holds the deciding vote in case of a tie.

The new framework and a more prudent policy stance have served India well so far. Confidence in the new monetary policy framework has contributed to curbing inflation expectations (Figure 5.A; Chinoy et al., 2016), to stabilising the rupee, and to attracting foreign capital. As inflation pressures have declined, the RBI has cut policy rates from 8% in December 2014 to 6.25% in October 2016. However, inflation has hovered above 5% and reaching the inflation target remains challenging going forward, especially if public sector wage rises spill over to other sectors or if commodity prices rebound. Bringing down inflation expectations further and establishing a solid nominal anchor to the Indian economy require monetary policy to continue erring on the prudent side until inflation clearly goes back close to the mid-range 4% target. This stance is also consistent with a Taylor rule (Figure 5.D). Overall, some monetary impulse is still to come as monetary policy transmission improves.

Improving monetary policy transmission

Since 2014 lending rates have adjusted only partially to the decline in policy rates (Figure 5.B). The impact of monetary policy on real activity is reduced by weaknesses in the transmission mechanism, including administrative measures such as the requirement for banks to hold government bonds (the Statutory Liquidity Ratio, SLR), credit quotas for priority sectors and caps on deposit rates. Several measures have recently been taken to improve monetary policy transmission including: the deregulation of interest rates offered on small saving schemes, incremental cuts in the SLR, the reduction in the daily cash reserve ratio that banks must keep with the central bank, and regulatory changes to force banks to rely more on the marginal cost of funding when calculating lending rates. Easing further regulatory requirements on banks to hold public bonds and lend to priority sectors would strengthen transmission and reduce distortions in the banking system. This would also support the development of the corporate bond market.

Figure 5. **Monetary policy: recent actions and outcomes**



1. The Taylor rule is: nominal interest rate = real natural interest rate + inflation rate +0.5 (inflation gap) + 0.5 (output gap); the inflation target is taken to be 6% before February 2016 and 4% since February 2016; the natural interest rate is taken to be 1.75%, as suggested by Kumar Behera et al. (2015).

Source: Reserve Bank of India and OECD calculations.

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Financial sector issues: improving banks' health and promoting the corporate bond market

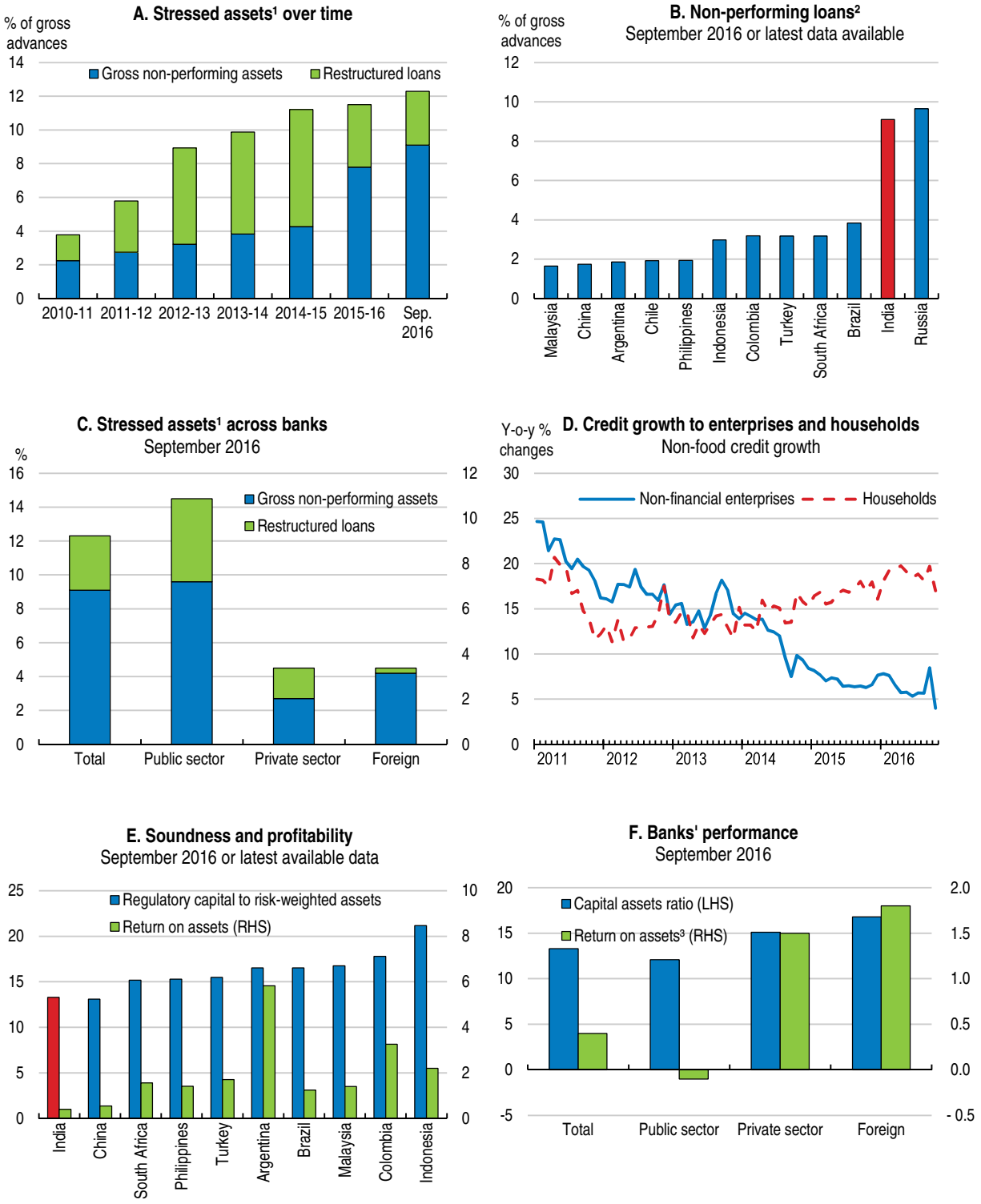
Banks' stressed assets (including non-performing loans and restructured assets) have increased in recent years, reaching 12.3% of GDP in September 2016 (Figure 6.A). The increase in NPLs largely reflects greater recognition of them, rather than a further deterioration of underlying fundamentals. The RBI launched an Asset Quality Review (AQR) to identify stressed loans and ensure that banks were taking proactive steps to clean up their balance sheets (Rajan, 2016). Non-performing loans (NPLs) largely originate from delays in infrastructure projects and weaknesses in risk management (RBI, 2015a and 2015b; IMF, 2015 and 2016; Gynedi, 2014). Iron and steel and power industries are characterised by both high leverage and interest burden (RBI, 2016d). As such, many NPLs are backed by "real" assets which can be expected to become profitable when projects are completed. Public banks, which hold 70% of total commercial banking sector assets, hold an outsized share of NPLs (Figure 6.C).

Measures have been taken recently to promote swift resolution of NPLs (Table 4), in line with recommendations in the previous OECD Economic Survey of India (OECD, 2014). The RBI has established a large borrower database for loans over INR 50 million, and banks need to regularly report on the status of loans. To give creditors more control over the stressed entity, the Strategic Debt Restructuring scheme introduced in June 2015 required all lenders to meet in a Joint Lending Forum and allowed secured creditors to convert loans to equity. The scheme for sustainable structuring of stressed assets (S4As) launched in June 2016 allows banks to convert up to half of corporate loans into equity-like securities, with banks working under the oversight of an external agency ensuring transparency. Foreign direct investment in asset reconstruction companies has been deregulated in 2016. A new bankruptcy code has been passed and is being implemented. The government also established six new Debt Recovery Tribunals. To curb banks' exposure to large stressed corporate entities in the future, the RBI announced in August 2016 that banks will have to set aside higher provisions and assign higher risk weights for loans to large companies beyond a certain limit from April 2017. The Indian authorities should closely monitor these measures for their efficacy in speeding up resolution, and take remedial action where necessary.

Capital ratios of Indian banks, in particular public banks, are low in international comparisons (Figure 6.E and 6.F). The RBI publishes the results of stress tests twice a year. It concluded that, in aggregate, the banking sector can endure a crisis (RBI, 2016d) as the capital to risk-weighted assets ratio would remain above the regulatory threshold of 9% under the extreme scenario of a three standard deviations shock to NPLs. Yet, the stress test revealed that 23 banks – holding 41% of banks' total assets - might fail to maintain the required capital ratio. Performance of public banks is even worse, as the capital ratio of 20 of them (out of 26) is likely to fall below 9%. To reduce uncertainty, the stress tests results should be reported for individual banks.

Banks will need more capital to safeguard financial stability and meet Basel III requirements. According to the Indradhanush plan of the government, banks will need INR 1.8 trillion (1.4% of 2014-15 GDP) by end-March 2019 for this purpose. Capital transfers from the central government will finance part of the needs (INR 0.7 trillion). To avoid overburdening the budget, privatisation option could play a role and will require the government to lower the current 51% threshold below which the government share in public banks cannot fall, though golden shares could be used to ensure some degree of government control. The on-going consolidation process among public banks is welcome and should continue. However, some banks may need to be closed down or merged with other banks.

Figure 6. **Challenges in the banking sector**



1. In percentage of gross advances. A restructured asset is an asset whose terms have been modified, including alteration of repayment period, repayable amount, instalments and rate of interest.
2. Ratio between non-performing loans (NPL) and total loan portfolio. NPLs are loans which ceased to generate income for the bank.
3. Return on assets is the net profit generated on total assets.

Source: Reserve Bank of India for panels A, C, D and F; IMF Financial Soundness Indicators database for panels B and E.

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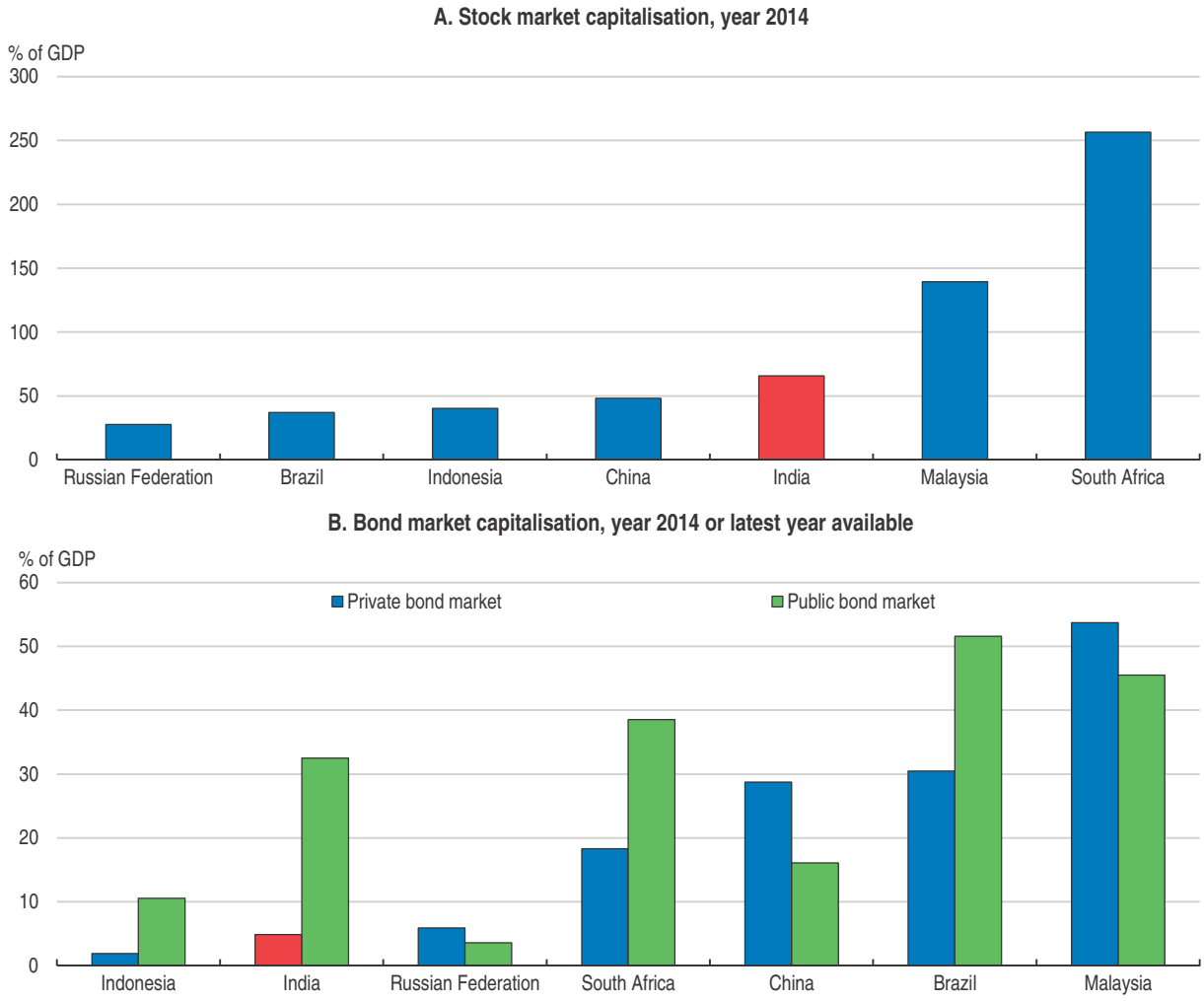
To provide adequate capital to the public sector banks and improve governance, the government launched the "Indradhanush" programme. This programme separates the posts of chairman and managing director, revamps the procedure for selecting independent directors and sets up the bank board bureau (a body of professionals and officials which started functioning in 2016) to replace the existing appointment board. This makes the recruitment for senior management of public banks more transparent. Efforts have also been made to increase public bank autonomy and strengthen their accountability. However, recruitment and wage setting remain subject to public sector rules which can make it difficult for the public banks to compete with the private banks in attracting talents.

A more dynamic corporate bond market would support investment projects. Bond market capitalisation is relatively limited and dominated by public bonds (Figure 7). Domestic institutional investors, such as pension funds and insurance companies, have to hold a large share of their assets in government bonds. Foreign institutional investors face limits on corporate bond holdings which restrains the amount of long-term and stable money which could fund infrastructure investment projects. So-called "Masala

Figure 7. **Stock and bond market capitalisation**



Source: World Bank Financial Development and Structure Dataset.

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bonds" – *i.e.* rupee-denominated bonds issued in the overseas market – were issued for the first time in 2016. To support the development of the corporate bond market further, the authorities should relax the restrictions on domestic and foreign investors as recommended in the *2014 OECD Economic Survey of India* (Table 4). Implementing the recent RBI proposal to accept corporate bonds as collateral under the liquidity adjustment facility would also contribute.

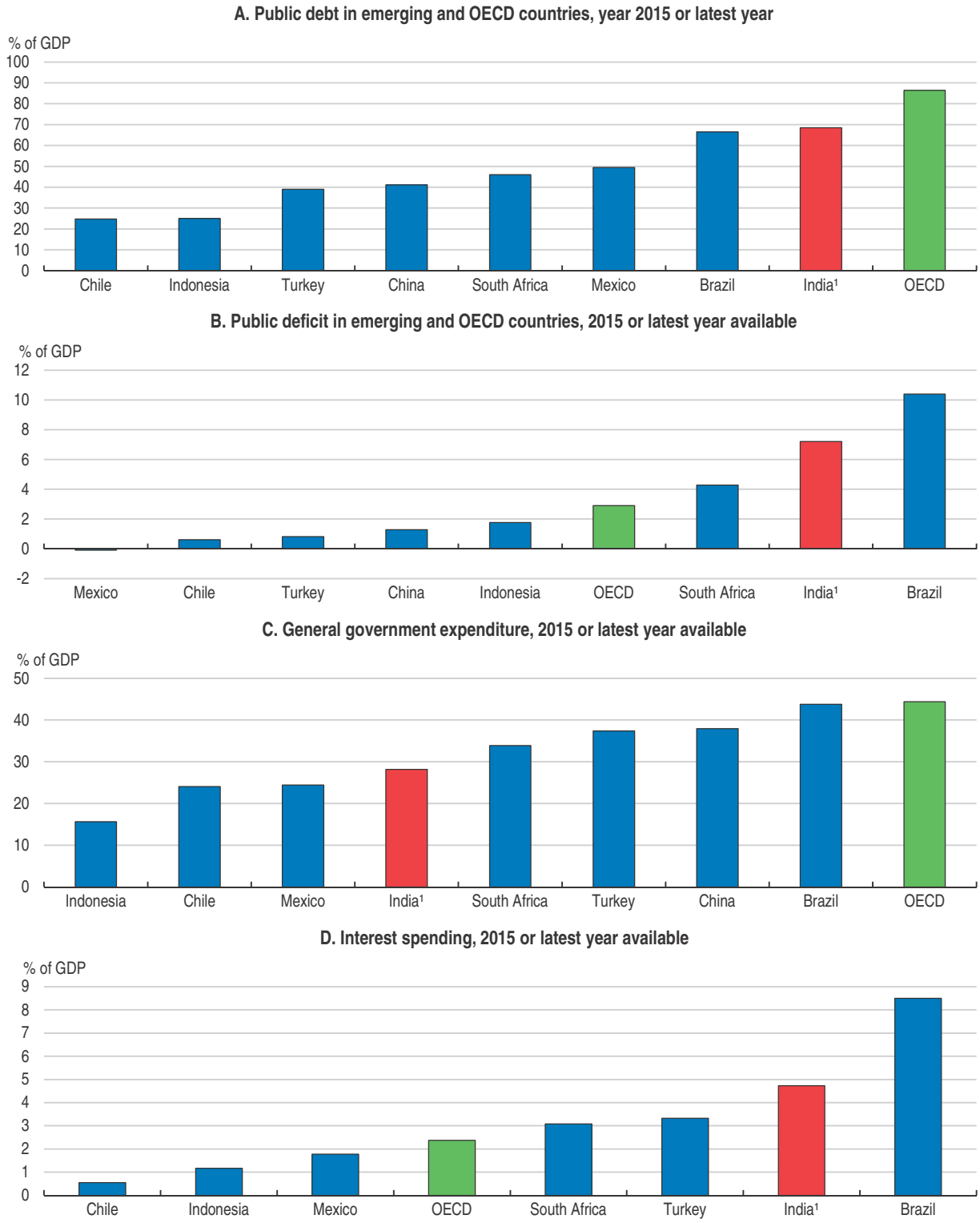
Strengthening the fiscal framework

India's public debt is high compared with other emerging economies (Figure 8.A) and interest payments account for a relatively large share of overall spending (Table 3). Public debt is largely denominated in rupees, reducing external vulnerabilities. Fiscal consolidation has been pursued by central government since FY 2012-13 and its deficit declined from 4.9% in FY 2012-13 to 3.9% in FY 2015-16. The government took advantage of low oil prices to eliminate diesel subsidies, to better target other subsidies (in particular for cooking gas) and to raise excise duties on petrol, diesel and coal. The service tax rate was raised from 12 to 15% (including the new *Clean India* earmarked tax). Dividends paid by public enterprises also increased. However, the deficit for the states has risen, resulting in an increase in the combined deficit and debt to GDP ratio (Figure 9.A), although there are large variation in fiscal positions across states (Figure 9.B).

The central government Budget for FY 2016-17 targets a further reduction in the central government deficit to 3.5% of GDP. The recent increase of 16% to 23% in public wages and public employees' pensions, as suggested by the Pay Commission (in India, the public wage structure is revised every 10 years), will increase central government spending for FY 2016-17 by an estimated 0.4% of GDP. Spending priority has also been given to the rural sector, recapitalising banks, and raising infrastructure spending on nuclear and renewable energy, roads, railways and ports. The financing of a large investment projects through public enterprises, i.e. off-budget, receipts from privatisation and the auction of telecom spectrum, as well as new efficiency gains stemming from the subsidy reform has helped contain the central government deficit. Still, the cost for a subset of commodities and services that the government subsidises is estimated at 4.2% of GDP (Government of India, 2015a) although a lower amount appears in the budget (1.8% of GDP for FY 2015-16).

Debt sustainability analysis highlights possible outcomes and risks going forward (Box 3). The current fiscal stance of a primary deficit of 2.5% of GDP will put the debt-to-GDP ratio on a declining path, assuming growth remains high (7.5%) and interest rates on the public debt do not rise (the baseline in Box 3). Even if interest rates were to rise somewhat, the debt-GDP ratio would still decline. However, a significant fall in growth would require tighter fiscal policy to keep the debt-GDP ratio from rising steadily (the last two scenarios in Box 3). Some tension may appear in that the Statutory Liquidity Ratio holds down public debt costs, but may also undermine growth by weakening the financial system. Public finance risks are underlined by India's debt ratings, which are at the lowest investment grade. Against this backdrop, debt should be brought down gradually (in relation to GDP), which may well require some fiscal tightening, as the central government plans to do as reflected in the draft budget for FY 2017/18 (Box 4).

Figure 8. **International comparisons for fiscal outcomes**



1. Data for India are revised estimates by the Reserve Bank of India for the fiscal year 2015-16.

Source: OECD Economic Outlook 100 database; Reserve Bank of India; Brazilian ministry of economy; and World Bank World Development Indicators database.

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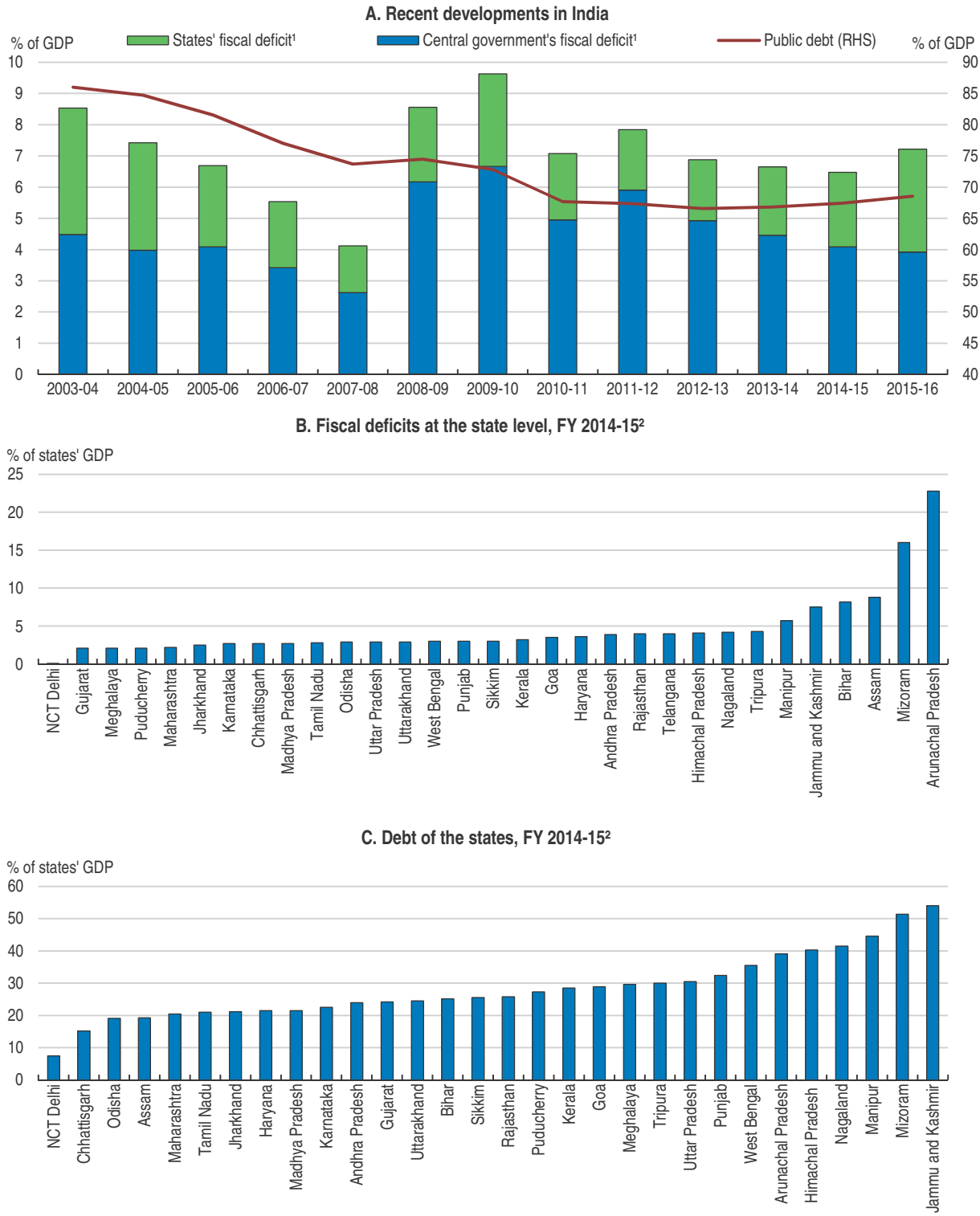
Figure 9. **Fiscal outcomes for the central government and the states**



1. Data for the fiscal year 2015-16 are revised estimates by the Reserve Bank of India.
2. Revised estimates by the Reserve Bank of India.

Source: Reserve Bank of India, September 2016 Monthly Bulletin; Controller General of Accounts; and Reserve Bank of India.

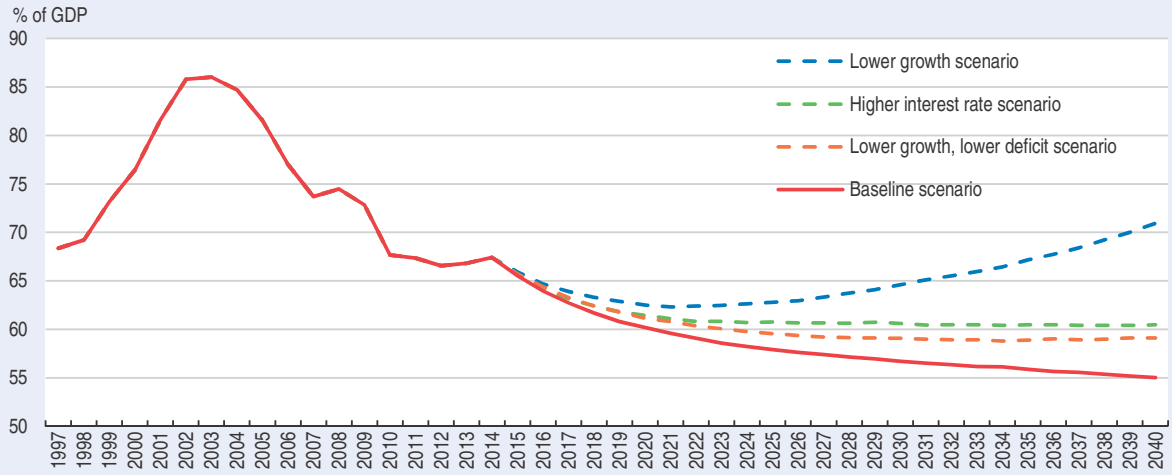
StatLink http://dx.doi.org/10.1787/888933453365

Box 3. **India's public debt: is it sustainable?**

General government debt declined from 86% of GDP in FY 2003-04 to 69% in FY 2015-16, despite relatively large primary deficits, owing to the Statutory Liquidity Ratio, which holds down interest costs, and robust economic growth. Debt sustainability depends on growth, inflation, interest rates and fiscal policy (Figure 10):

- In the baseline, "no policy change", scenario, the primary deficit stays at 2.5% GDP (its level in FY 2015/16), inflation at 4%, real long-term interest rates of 2¾% (the average 10-year bond real rate in 2015 and the first half of 2016), and economic growth at 7.5%. The debt to GDP ratio declines to 55% of GDP in 2040.
- If nominal interest rates were to rise gradually by one percentage point by 2025, the debt to GDP ratio would still decline to 60% of GDP in 2040.
- However, if real GDP growth were to fall gradually to 5% by 2040, and no policy changes, the debt-to-GDP ratio would rise.
- Even in this lower growth scenario, the public debt would stabilise at slightly below 60% of GDP if the primary deficit were gradually reduced by one percentage point of GDP.

Figure 10. **Public debt to GDP ratio under four stylized scenarios**



Source: OECD calculations; and Joumard et al. (forthcoming).

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Table 3. **Key public finance data for combined central government and states**

% of GDP

	2005-06	2010-11	2014-15	2015-16
Total spending	26.8	28.4	25.1	28.2
of which:				
Current spending	22.2	23.9	21.1	22.9
Interest payments	5.7	4.6	4.6	4.7
Capital spending	3.7	3.6	3.3	4.0
Total receipts[1]	20.1	21.3	18.7	20.9
of which:				
Tax revenue	16.1	16.6	15.7	16.9
Privatisation receipts	0.0	0.3	0.3	0.2
Fiscal deficit	6.7	7.1	6.5	7.2
Central government	4.1	4.9	4.1	3.9
States[2]	2.6	2.1	2.4	3.3

Note: Data for 2015-16 are revised estimates from the RBI September Monthly Bulletin.

1. Total receipts are calculated as the difference between total spending and fiscal deficit.
2. The fiscal deficit of the states is calculated as the difference between the consolidated fiscal deficit and the deficit of the central government.

Source: Reserve Bank of India September 2016 Monthly Bulletin; and Controller general of accounts.

Box 4. **The draft FY 2017/18 central government Budget and related reforms**

The FY 2017/18 draft Budget presented on February 1st, 2017, foresees a small further decline in the central government deficit from 3.5% of GDP in FY 2016/17 to 3.2% in FY 2017/18 (slightly higher than the previous 3% target).

Key measures include:

- An increase in infrastructure spending, in particular transport (roads, railways and airports) and social housing.
- New efforts to recapitalise banks, although the amounts is lower than in the previous year (INR 100 billion in FY 2017/18 against 250 billion in FY 2016/17).
- A cut in the corporate income tax rate from 30% to 25% for small companies - those with a turnover of up to INR 500 million (about USD 7.4 million); the government expects this measure to benefit 96% of Indian enterprises.
- A more progressive personal income tax structure, with a cut in the lowest personal income tax rate from 10% to 5% and a surcharge for high-income earners. Tax forms will be simplified.
- New measures to encourage digital payments and discourage the use of cash, including tax concessions to small companies that transact digitally, a ban on cash transactions above INR 300 000 (about USD 4450) and limits on cash donations for political funding and charitable trusts.
- Reforms to promote FDI, including abolishing the Foreign Investment Promotion Board and less stringent FDI regulations.

Institutional reforms: improving the budget process and the medium-term fiscal framework

The budget process has also been reformed to enhance public finance effectiveness. First, the budget session of Parliament started one month earlier than usual to ensure that the Finance Bill is passed before the start of the new fiscal year (April 1st). Second, the long-standing distinction between plan and non-plan spending, which resulted in a fragmented budgetary allocation and constrained the efficient management of public expenditure, has been abolished. Third, the coverage of the budget has been broadened to include the Railway budget. Fourth, the projections made by the Finance Commission form the basis for the budgetary medium-term framework.

The government also announced that it would examine the recommendations of the Fiscal Responsibility and Budget Management Committee for the medium-term fiscal strategy. The general government debt-to-GDP ratio is to become the main macroeconomic anchor of fiscal policy. The proposed roadmap requires debt to decline to 60% of GDP (40% for the central government and 20% for the states) by 2023, from 68.6% in FY 2015/16. The deficit target of the central government is to be lowered to 3% of GDP in the next 3 years. The proposed fiscal roadmap includes an escape clause in case of far-reaching structural reforms.

Committing to multi-year fiscal targets while allowing for a stabilisation role

A stronger fiscal framework would improve macroeconomic stability and provide fiscal space to finance key social and physical infrastructure. Although India's public sector is relatively small, the heavy reliance on the corporate income tax makes revenues sensitive to the business cycle. Also, fluctuations in commodity and food prices affect India's public spending through the large subsidy programmes for food, energy and fertilisers. The 2003 Fiscal Responsibility and Budget Management Act (FRBMA) required the central government to commit to multi-year fiscal targets, which were deferred to allow fiscal policy to react to the global financial crisis. Central government's commitment to fiscal consolidation has been renewed, with the 2012 fiscal consolidation roadmap. The design and coverage of fiscal rules, however, remain key issues.

Contrasting with a deficit rule, a spending rule would allow the automatic stabilisers to work fully on the revenue side, where they tend to be most powerful. Public spending is low while many Indians lack access to quality public services and social insurance. Spending on infrastructure, health, education and other programmes which support inclusive growth should be given priority over less productive current spending and be allowed to increase over the medium term. But a structural increase in future spending would have to be accompanied by a structural increase in revenues. If the spending increase is planned, the revenue to pay for it should be pre-programmed.

To secure a decline in the public debt-to-GDP ratio over the medium term, fiscal consolidation efforts at the central government level need to be accompanied by fiscal prudence at a sub-national government level. Most states have their own fiscal rules (Buiter and Patel, 2010) which, in many cases, require the deficit to remain below 3% of the state's GDP (Kerala has a 2% limit). In addition, states cannot borrow on the market without central government approval. In FY 2015-16, the gross fiscal deficit for the states stood at 3.3% of GDP, compared to a 2.4% deficit according to budget number (RBI, 2016c). In 2016, states were given more flexibility in complying with the 3% rule, if they had a relatively low debt and debt service ratio in the preceding year.

Given the states' wide-ranging spending responsibilities and their large share of tax revenue, medium-term fiscal targets should cover the states, or at least should be made consistent with states' fiscal rules. As part of the fiscal decentralisation drive, states now receive a larger share of the general government "divisible tax pool" and rely less on earmarked grants. This should give states more autonomy to prioritise growth-enhancing spending items, such as hard and soft infrastructure. In recent years, states accounted for over 60% of total government investment spending. In the coming years, however, investment spending may be squeezed by likely wage and pension hikes and the partial takeover of the debt of states' electricity distribution companies (3.5 % of GDP in total), affecting the quality of spending (RBI, 2016b).

Improving fiscal policy credibility

Better fiscal data help to contain fiscal risks and improve government accountability (Rastogi, 2015). In some areas, progress has been made and India fares relatively well. A *Statement of revenue foregone* with estimates of tax expenditures by key categories has been presented annually to parliament since the mid-2000s in the context of budget discussions. And in 2016, the government published information on the number of taxpayers per tax brackets. Nonetheless, policy would be enhanced by a number of measures (Buiter and Patel, 2010): compiling and publishing fiscal accounts for local governments; recording spending and receipts on an accrual basis rather than a cash basis; systematically reporting accounts of autonomous bodies, extra-budgetary funds and contingent liabilities; recording privatisation receipts and other asset sales not as revenue but as asset transactions (below the line) according to international accounting conventions.

To improve the government's credibility and accountability, and watch over the implementation of the fiscal rules, India should establish an independent fiscal council. Fiscal councils exist in 24 OECD countries, including Chile and Korea, and also in South Africa. Their mandate differs widely, including the assessment of macro-economic and budgetary projections, impact of specific measures and long-term sustainability. So does their status: fiscal councils can be independent institutions (Germany and Portugal), paired with other independent institutions (Finland and France), under the legislative branch

(Canada, Kenya, Korea, South Africa and the United Kingdom) or under the executive branch (Chile). Overall, evidence suggest that fiscal councils have had a positive impact on fiscal outcomes (Beetsma and Debrun, 2016; Debrun and Kinda, 2014; Debrun et al., 2013; Hagemann, 2011). International experience also suggests that independence of the fiscal council and a presence in the public debate are important for its effectiveness.

A fiscal council in India could monitor the implementation of the fiscal strategy, and in particular the consistency of the annual budgets with the medium-term path, and assess when a correction is required and at what pace. If the fiscal rules include escape clauses, the fiscal council should verify whether they are exercised in an appropriate way. This institution could carry out fiscal sustainability analysis and produce independent growth, inflation and public finance projections. It should also advise the government on how to improve the fiscal data, accounting and fiscal risk assessment.

Table 4. **Past OECD recommendations on the monetary, financial and fiscal policy frameworks**

Recommendations	Actions taken since the 2014 Survey
Implement flexible inflation targeting	Done in 2015.
Further ease restrictions on bond market investment by foreign institutional investors	No action taken
Strengthen bank supervision by early recognition of asset deterioration and stricter provisioning standards	The Asset Quality Review has been performed, requiring banks to better provision stressed assets. To reduce exposure of banks to large corporates, the amount that banks can lend to counterparty will be limited to a proportion of the banks' capital base from April 2019. Banks will also have to set aside higher provisions for large loans.
Wind down bank lending obligation to priority sectors and gradually reduce the proportion of government bonds required to be held by banks and institutional investors (statutory liquidity ratio)	The Statutory Liquidity ratio was reduced from 22% to 21.5%. Priority lending requirements have not been reduced.
Pursue fiscal consolidation while avoiding one-off measures and cuts in growth enhancing spending	Fiscal consolidation has taken place at the central government level.
Shift public spending away from energy subsidies towards investment in physical and social infrastructure.	Diesel subsidies were eliminated and cooking gas subsidies have been replaced by targeted cash transfers. Infrastructure investment has increased. Health care spending remains low.
Implement a national value-added tax (GST) with only limited exemptions	The bill was passed. The government aims at rolling in the GST from April 2017

A comprehensive tax reform to promote inclusive growth

India should raise more and better tax revenue to finance large spending needs for social and economic infrastructure. The landmark Goods and Services Tax (GST) reform will replace a large number of taxes on goods and services which currently account for the bulk of the total tax intake. It will contribute to make India a single market and, by spurring competition, it will promote productivity gains. By reducing tax cascading, it will support the manufacturing sector and investment. It is however designed to be revenue-neutral and thus does not provide an avenue for raising more revenue at least in the medium term.

A comprehensive reform of property, personal income and corporate taxes is needed to complement the GST reform. It should aim at raising more revenue to fund social and physical infrastructure in a way that support economic growth, promote social justice and empower sub-national governments to better respond to local needs.

Using personal income and property taxes to raise more revenue and promote inclusiveness

Personal income tax revenue is low and its redistributive impact is limited. As in many emerging economies, the low level of income of most people and a large informal sector pose challenges to raising revenue from this source (Table 5). Some countries, in particular South Africa, have however been more successful in engaging their population in the tax system. In India, only 53 million individuals paid personal income tax in 2014/15, i.e. about 5.6% of the population, reflecting the very large zero rate tax bracket and the exemption for agricultural income. An individual starts paying taxes when its income reaches 2½ times the average worker income in the organised sector (Figure 11). For those paying income taxes, the system embodies little progressivity since the top rate kicks in at a very high level by international standards (more than 12 times the average wage of a worker in the organised sector). A host of specific tax expenditures further reduces tax liabilities of the well-off, such as a tax allowance for the repayment of mortgage principal

Table 5. **Tax revenue: level and mix**

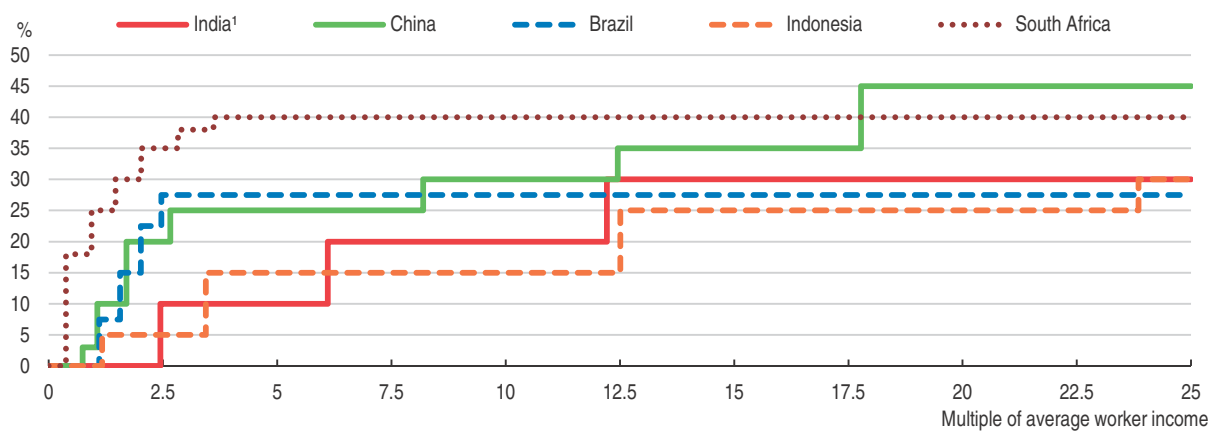
as a % of GDP

	Brazil	China	India	Indonesia	Russia	South Africa	OECD
	2014	2013	2014	2014	2014	2014	2014
Taxes on income	6.9	4.9	5.6	5.2	6.7	14.3	11.5
Individuals	2.5	1.1	2.2	2.3	3.4	8.9	8.4
Corporations	3.1	3.8	3.4	2.9	2.9	4.8	2.8
Unallocated	1.3	0.0	0.0	0.0	0.4	0.5	0.3
Social security contributions	9.6	4.6	0.0	0.0	6.7	0.8	9.5
Taxes on property	1.9	1.5	0.8	0.2	1.1	1.4	1.9
Taxes on goods and services	13.9	13.5	10.3	5.4	13.7	11.4	11.0
Other taxes	1.0	0.2	0.1	1.4	0.0	0.0	0.2
Total tax revenue	**33.4**	**24.8**	**16.8**	**12.2**	**28.2**	**27.8**	**34.2**

Source: OECD Revenue Statistics database; IMF; and India's Ministry of Finance.

Figure 11. **The marginal income tax rates kick in at high income levels**

Statutory marginal personal income tax rates by income, FY 2014-15



1. The average worker income is for the organised manufacturing sector as reported in the Annual Survey of Industries.

Source: Annual Survey of Industries; OECD Taxing Wages 2015; and Ministry of Finance of India.

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and interests. The taxation of capital income is low, even zero, in most cases. In addition, the Hindu Undivided Family (HUF) offers those with substantial property income an avenue to reduce their tax liabilities and complicates the implementation of an inheritance tax.

The personal income tax (PIT) could raise more revenue and better contribute to horizontal and vertical equity. First, efforts to promote tax compliance and improve the ease of paying taxes should be strengthened. Tax compliance could be incentivised, e.g. by securing access to services (such as life insurance) to those filing a tax return for the first time. Second, agricultural income of rich farmers should be brought under the PIT ambit so to promote vertical equity and avoid tax evasion with non-agricultural re-categorised as agricultural income. The political economy of removing this exemption is however challenging. Third, most tax expenditures should be abolished since they benefit mostly the rich (e.g. tax allowance for the principal and interests of housing loans). Fourth, the PIT schedule (in particular income thresholds) could be brought more into line with other emerging economies, with more people paying taxes and top rates kicking in at a lower income level. Simulations by the OECD suggest that bringing the PIT schedule more into line with other emerging economies and abolishing tax expenditures would raise PIT revenue by at least 50% (Chapter 1).

There is also scope to raise more revenue by less distortive property taxes. Wealth in India is extremely concentrated and real estate accounts for the bulk of household assets. States levy stamp duties and registration charges on the sale of real estate, and municipalities levy some recurrent taxes. Raising more revenue from recurrent property taxes would require granting municipalities more power to implement them and set tax rates, and establishing up-to-date property values. In addition, India could introduce an inheritance tax, starting with a relatively high exemption threshold and low rates, since this would help promoting equal opportunity and inter-generational mobility (OECD, 2015d; Brys et al., 2016; Joumard et al., 2012).

Reforming company taxation to support investment by reducing distortions and improving certainty

Creating a business-friendly tax environment is key to promoting investment, to raising India's competitiveness and to creating more jobs. The statutory corporate income tax (CIT) rate, 30% plus surcharges adding to 34.6% for resident companies, is high by international standards. Enterprise surveys suggest that the high CIT rate is a major obstacle to business development. Tax concessions lower effective tax rates (to 23% in FY 2013-14) but create large variations across enterprises by size, sector and ownership. Tax concessions also raise uncertainty for investors, as tax law is often unclear and audits can be aggressive. The number of tax disputes is large and about 40% of them go through the court system, resulting in delays and further uncertainty (Thomas et al., forthcoming). Recent efforts to improve clarity in tax laws and their interpretation (*e.g.* on retrospective taxation) should continue so as to build a more predictable environment for investors.

The government plans an ambitious base-broadening and rate-reducing tax reform: the CIT rate for resident companies will be lowered to 25% over a five-year period and most tax concessions will be phased out as suggested in the past *OECD Economic Survey of India* (Table 6). The FY 2016-17 Budget introduced a reduced statutory rate for small and new

Table 6. **Past OECD recommendations on corporate income tax**

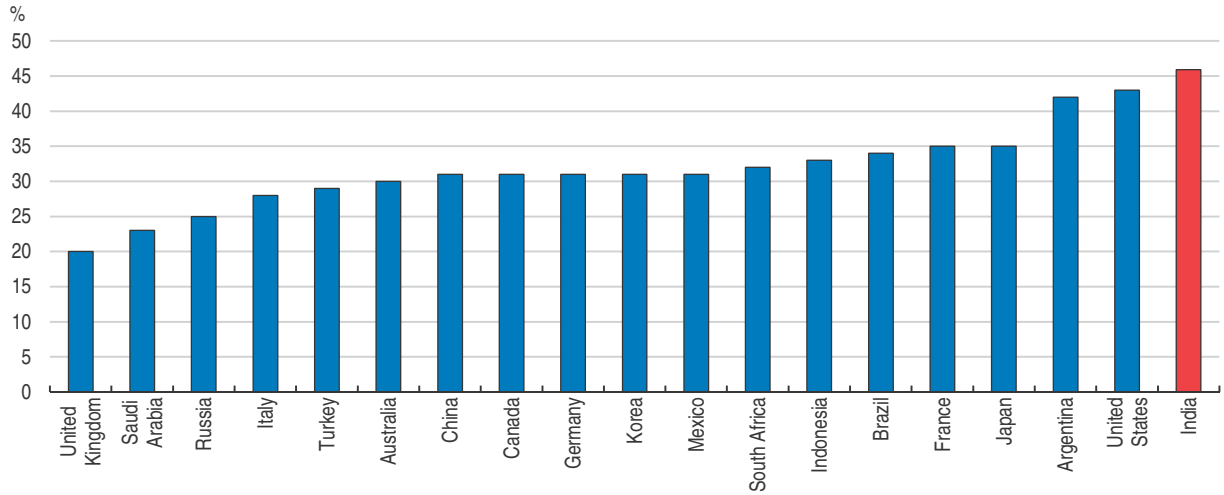
Recommendations	Actions taken since the 2014 Survey
Reduce the extent of exemptions for corporate taxation	In the Budget for FY 2015-16, the government proposed lowering the CIT rate from 30% to 25% over a 4-year period while phasing out most tax exemptions. The FY 2016-17 Budget reduced the CIT rate for small and new manufacturing companies to 29% and 25%, respectively.
Ensure that tax incentives in the new SEZs are neutral between labour and capital-intensive projects which produce the same pre-tax return	Multi-year tax exemptions for exporters in special economic zones (SEZs) are to be subject to sunset clauses.

manufacturing companies, but such targeted reductions should be temporary steps on the way to a single 25% rate and the elimination of most concessions (including overly generous depreciation allowances). This reform should be implemented as soon as possible.

The relatively high CIT rate makes it difficult to attract more foreign investment, as the statutory rate on foreign dividends is quite high (Figure 12). To increase India's attractiveness, the distribution dividend tax should be replaced by a traditional withholding tax system, which may be reduced by tax treaties, and the non-resident CIT rate should be lowered to the resident rate.

Increasing the capacity and expertise of the tax administration and improving its management could help raising more revenue while making the system fairer. Many commendable measures have recently been taken to reduce the cash transactions, combat tax evasion and improve the ease of paying taxes. The government is also making efforts to clarify tax legislation and reduce the very high number of tax litigations. Still, the 2017 edition of the World Bank *Ease of doing business* survey indicates that India ranked 172nd out of 190 countries on the ease of paying taxes. Government's efforts should thus be pursued to help boosting investment and growth. In particular, the audit process should be improved to reduce the number and length of tax disputes while the number of tax employees and their training should be lifted.

Figure 12. **The combined statutory tax rate on international dividends payments is high, 2012**



Source: Thomas et al. (forthcoming).

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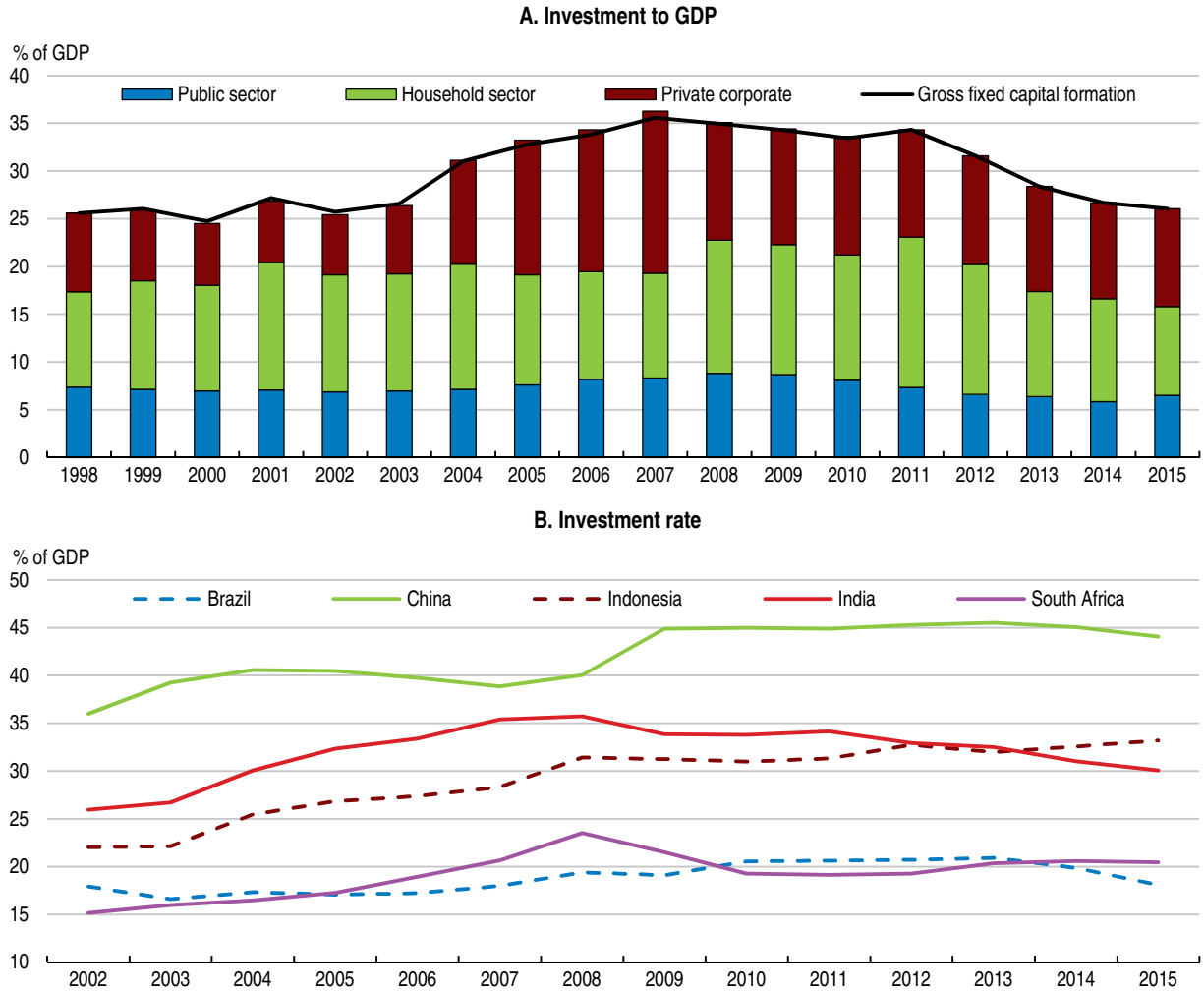
Promoting stronger and more inclusive growth

Lifting investment and productivity is essential for well-being. Making growth more inclusive also requires enabling the poor and providing equal opportunities for all. India has taken various initiatives in these directions and some of them can be considered as best practices for many other countries - the on-going reform of price support for the poor (including for cooking gas) together with financial inclusion initiatives are cases in point. However, additional reforms are needed to create more jobs in the organised sector and mitigate pressures on the environment. As agricultural employment shrinks and the working-age population grows, providing skills to match the needs of labour-intensive sectors will be also a key challenge for many years to come.

Achieving stronger long-term growth by lifting investment and productivity

India's potential growth is high. According to OECD estimates, it stands at slightly above 7% in 2016, largely consistent with other estimates (Anand et al., 2014; Kumar Bhoi and Kumar Behera, 2016). However, it has been on a mildly declining trend since 2012, as the investment to GDP ratio dropped from 34% in 2011 to 30% in 2015 (Figure 13). Lifting

Figure 13. **The investment rate has fallen**



Source: OECD Economic Outlook 100 database; and Central Statistical Organisation.

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investment is key to achieve stronger long-term growth. It will require: more and faster public investment to reduce infrastructure bottlenecks and crowd in private investment, faster and more predictable land acquisition, as well as further improvements in regulations towards foreign direct investment (FDI) and ease of doing business.

More and faster public investment

To improve the quality of infrastructure and crowd in business investment, public investment has been raised, with priority given to energy and transport infrastructure. Road project awards have increased steadily since 2014 and several rail projects were approved, after years of low government investment, in particular to improve capacity to transport coal. For example, the Dedicated Freight Corridors (DFC) are ambitious rail infrastructure projects: two corridors - the Eastern DFC (1 840 route km) and Western DFC (1 502 route km) - are being constructed. The DFC project is expected to transform Indian transportation by implementing major infrastructural and operational innovations such as higher speed and carrying capacity. DFC will save 457 million tonnes of carbon dioxide in first 30 years of operation. A public-private partnership model was developed for railway stations so as to allow raising extra-budgetary funds. Investment in renewable energy, in particular solar capacity, has also surged.

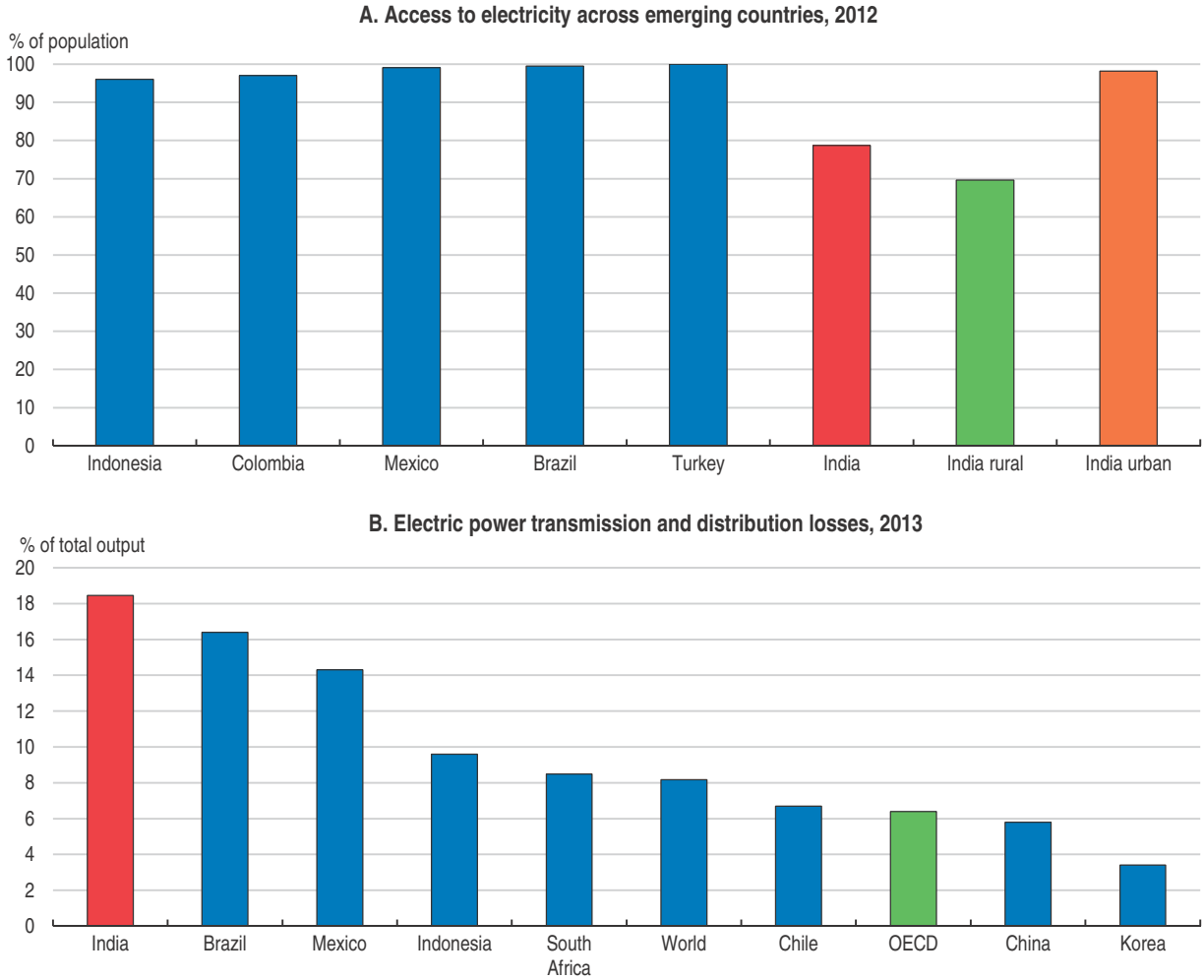
To fast-track large public and private investment projects, the Project Monitoring Group has been set up in the Prime Minister's Office to improve the coordination across levels of government, ministries and departments. The proportion of projects with time and cost overruns has declined. Average time and cost overruns for infrastructure projects remain high, however, raising the cost of capital of these companies, and ultimately weighing on banks' balance sheets. Stretched budgets at the central government and state levels, complex and uncertain land acquisition process, stringent environmental and social clearances, combined with restrictive pricing rules for public utility services (in particular electricity and water), have also affected infrastructure investment. To attract equity investments for infrastructure, the government launched the National Infrastructure Investment Fund.

The case of electricity: power for all

A key condition for corporate investment to revive is to improve the supply of electricity. The government unveiled an ambitious plan to provide electricity supply for all by 2019. India has already made great strides in improving access to modern energy, reducing the number of people without access to electricity since 2000 (Figure 14.A). Power generation capacity has surged over recent years (IEA, 2015) but power outages are still frequent, affecting economic activity and investment. India ranks 88 out of 138 countries in terms of the quality of electricity supplied (WEF, 2016). As manufacturing relies heavily on good infrastructure, it suffers most (OECD, 2014). The 2014 World Bank Enterprise Survey reveals that electricity is the second most important obstacle for manufacturing firms.

The poor financial health of the states' distribution companies triggers uncertainty for potential investors in power generation and results in poor quality of services in many regions. Power outages also adversely affect government's priorities like "Make in India" and "Digital India". A key reason behind distribution companies' financial stress is that electricity tariffs are set below the cost of generation and delivery in most states. Cross-subsidisation is prevalent from industry to households. Electricity is even free for farmers in some states. Together with supply disruptions, the higher prices undermine the competitiveness of

Figure 14. **Infrastructure should improve: the case of electricity**



Source: World Bank World Development Indicators database.

StatLink http://dx.doi.org/10.1787/888933453414

Indian firms. Overall, the average revenue of power utilities was 29% below the average cost of supply in 2014 (RBI, 2016b). As a result, electricity producers are often producing below capacity and are reluctant to invest while distribution companies are making losses and are unwilling to buy from electricity producers. Distribution companies' accumulated debt stood at around 3.5 % of GDP in 2015. The very large transmission and distribution losses (Figure 14.B) provide an indication of the investment deficit.

To ensure financial viability of power distribution companies and support investment in the power sector, the government launched the UDAY scheme in 2015 (Box 5). Its success lies in prudent and effective management of the distribution companies by the states and electricity tariff increases (which are unpopular). In their absence, the UDAY scheme may simply add to the state governments' debt burden while liabilities at distribution companies build up again – earlier attempts to restructure power sector debt provide lessons in this regard. As of December 2016, 18 states and union territories, accounting for the bulk of distribution companies' overall debt, have come under UDAY. The ensuing lowering of interest costs has been large and most of the states have made commendable efforts to reduce commercial and technical losses. However, few have significantly raised

Box 5. **Reforming the electricity sector: the UDAY plan and its likely impacts**

A prerequisite for promoting investment in power generation and in distribution is to address the financial troubles of power distribution companies – with outstanding debt INR 4.3 trillion, i.e. about 3.5 % of GDP.

Electricity is a shared responsibility between the central government and states, thus requiring a concerted reform effort. The tri-partite arrangement between the central government, states and distribution companies (Ujwal Discom Assurance Yojana, or UDAY scheme) envisages a target of reducing the losses to 15% by March 2019 from pre-UDAY level of about 26%. It entails:

- Reducing distribution losses through mandatory smart metering, up-graded transformers and meters;
- Reducing interest payments. Distribution companies will enter a tripartite agreement with the Ministry of Power and state governments; 75% of their outstanding debt will be taken over by the states and converted into lower-costs bonds over a 2-year period;
- The debt of distribution companies taken over by the states will not be included in the calculation of fiscal deficit of respective States in the FY 2015-16 and 2016-17. The plan allows states to overshoot the fiscal deficit limit if funds are used to bail out distribution companies.
- Strengthening financial discipline by requiring that future losses of distribution companies be taken up by states.

To increase the chance of UDAY to be implemented, compared with the 2012 Financial Restructuring Package which had similar objectives but little success, it is accompanied by incentives: if states perform well, they will be offered additional funding and supported with additional coal at notified (reduced) prices.

In December 2016, 18 states and union territories signed agreements with the central government to take over the outstanding debt of their power distribution companies and 4 states had given in principle approval. UDAY had addressed a large fraction of the debt of distribution companies, resulting in a substantial decline in interest costs. Twelve states had reduced distribution losses and at least eight had significantly narrowed the gap between average cost of supply and average revenue. To enable more states to join the scheme, the government extended the deadline by one year, up to end-March 2017.

The UDAY scheme could support investment in the power sector and have additional positive impacts. First, it could support the *Make in India* initiative: the manufacturing sector would be more competitive, were electricity bottlenecks removed. Second, it could contribute to reduce non-performing loans, which have weighed on the banking sector and thus on its ability to finance investment. Third, UDAY is expected to push states to raise electricity tariffs, in effect cutting electricity subsidies which have been highly regressive – the poorest 20% consume 45 kWh/month while the richest 20% consume 121 kWh/month, with less than 60% of rural households using electricity as the main source of lighting – and have contributed to low energy efficiency.

electricity prices. To support quality electricity for all, electricity tariffs should cover the economic costs of electricity provision. Enhanced communication on the main beneficiaries from subsidised electricity prices and expected improvements in electricity coverage rates and quality of electricity provision would help to unlock political economy considerations.

Easing land acquisition would underpin a pick-up in investment projects, especially in manufacturing

Difficulty in acquiring land remains a major constraint on the implementation of infrastructure and other investment projects. Land acquisition is often complex, costly and surrounded by uncertainty (Figure 15). In addition, uncertainty surrounding land titles and land acquisition interferes with credit markets, with more than 50% of corporate loans and 60% of retail loans having land and real estate as collateral (Krishnan et al., 2016).

Making the land acquisition process easier, faster and more predicable is key to boosting infrastructure and business investment projects. Government efforts to reform the Land Acquisition Act faced fierce opposition in Parliament in 2015 (Table 7). As land legislation is a shared responsibility between the central government and the states according to India's constitution, the responsibility of reforming land laws have been left to the states. Some of them have taken the lead, with consent from the government of India. The state of Rajasthan passed legislation in 2016 providing statutory backing to land records, effectively guaranteeing land and property ownership. Rajasthan also passed a Land Pooling Bill which eases aggregation of small land holdings and should facilitate the development of adequate infrastructure. Gujarat eliminated the requirement of a social impact assessment and consent clauses for certain types of development projects. Maharashtra allowed the sale of certain publicly-owned lands that were previously slated only for leasing and allowed mid-size plots to be divided. These new laws should help create an efficient, transparent and modern land market, provide certainty of tenure and end litigation that often mires investment projects.

Figure 15. **Registering property takes time and is costly**

Source: World Bank Doing Business 2017 database.

StatLink http://dx.doi.org/10.1787/888933453426

Table 7. **Past OECD recommendations on infrastructure and land**

Recommendations	Actions taken since the 2014 Survey
Impose clear timelines, rationalise documentation and implement single-window clearance for infrastructure projects	Coordination with the government and across government levels has been improved.
Improve the land registry. Assess and amend as needed the new land acquisition law. The government should review the timelines within the Bill and aim to make land acquisition faster	The central government approved an ordinance bill in December 2014 to amend the land acquisition law making it easier to acquire land in five key sectors (security and defence, infrastructure, power and affordable housing). The Bill eliminated the requirements of 80% consent from affected landowners and of a social impact study. The ordinance was re-issued three times up to September 2015. As the Bill could not be passed by the Parliament, the central government has encouraged state governments to experiment land reform. Several states have since passed land reforms. The Real Estate Bill passed in 2016 aims to introduce transparency and accountability in the property market. It establishes state level regulatory authorities and state level tribunals.

To clean up land titles, improve the quality of land registries (*e.g.* through digitisation) and overhaul the land litigation system at the national level, the impact of state reforms should be assessed and best-practices be identified and promoted. The National Institution for Transforming India (NITI Aayog), which replaced the Planning Commission in 2015, can play an important role in this respect.

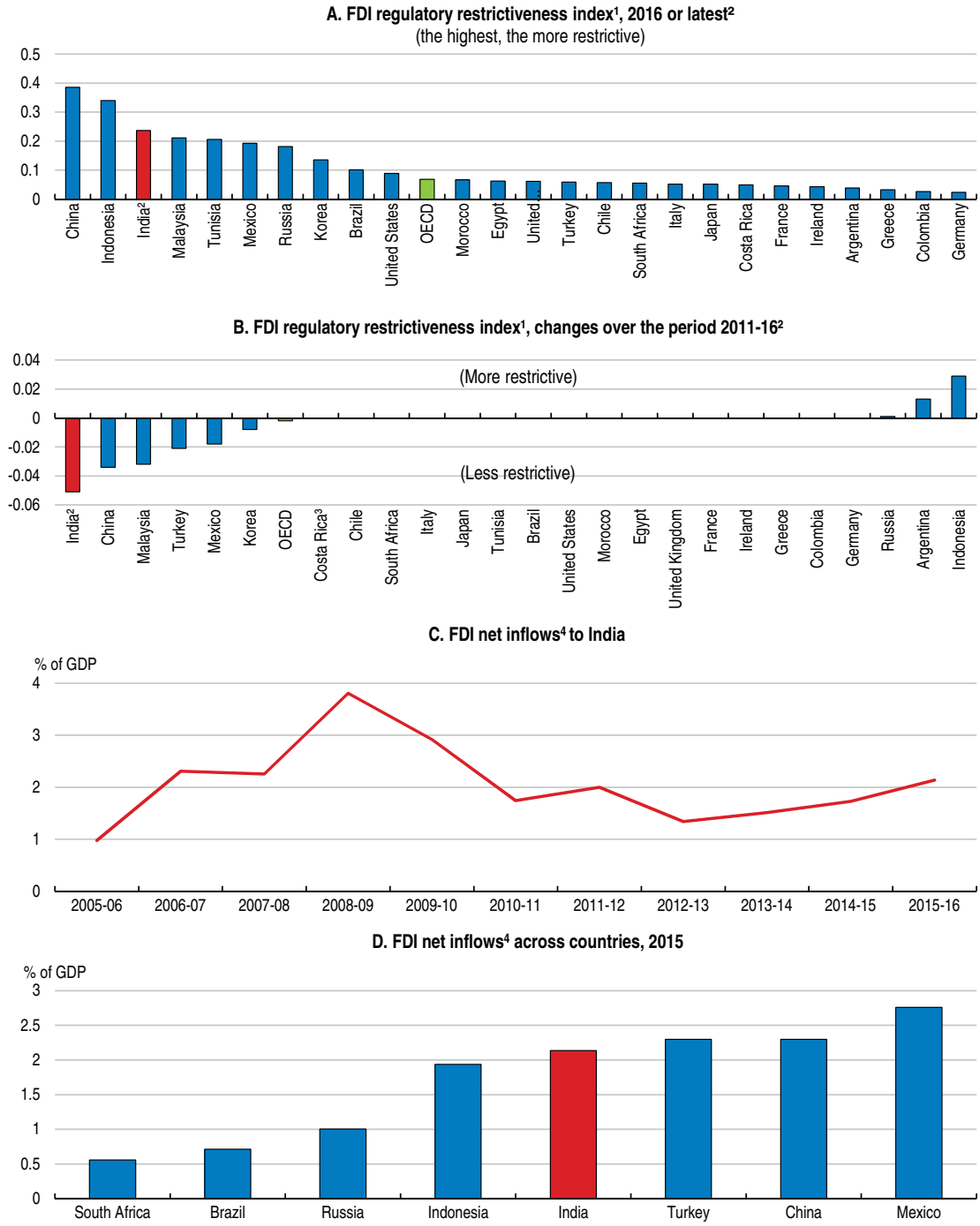
Deregulating foreign direct investment

Several measures to promote foreign investment (FDI) have been introduced. The OECD FDI restrictiveness index reveals that India is among the top reformers (Figure 16.B). In the context of the *Make in India* initiative launched in 2014, FDI reforms have focused on civil aviation, defence, agriculture, pension and insurance funds, air transport, railways and construction (Table 8). Caps on FDI have been raised and more sectors have been brought under the automatic route avoiding the administrative burden associated with the government approval route. Combined with measures to improve the ease of doing business (see below), FDI deregulation has supported FDI inflows, with particular buoyancy in construction and services. Yet, the OECD FDI regulatory restrictiveness suggests that restrictions remained relatively high in 2015 compared with many emerging economies and OECD countries (Figure 16.A), in particular in services such as media, financial and business services, holding back potential economy-wide productivity gains.

Promoting the ease of doing business and firm dynamism

Enabling firms, especially new entrants, to experiment with new technologies and business models is key to promoting productivity (OECD, 2015b). In 2015, insolvency procedures took 4.3 years in India, more than twice the time on average in China and South Africa, while the recovery rate of assets from bankrupt firms was significantly below many other emerging economies. In 2016, the government overhauled the multiple laws dealing with insolvency and replaced them with a Code that should facilitate time-bound closure of businesses. In the event of a default, the Code sets a time limit of 180 days (plus 90 days for exceptional cases) for resolution. The Code also creates a new institutional structure, with insolvency professionals and agencies, information utilities that will collate information about debtors and a bankruptcy board. Cross-country evidence suggests that some specialisation in expertise of judges and bankruptcy practitioners can lead to faster and cheaper procedures, and therefore higher recovery rates (OECD, 2013; McGowan and

Figure 16. **FDI: regulatory restrictiveness and inflows**



1. The FDI Regulatory Restrictiveness Index measures statutory restrictions on foreign direct investment across 22 economic sectors. It gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI: 1) Foreign equity limitations; 2) Discriminatory screening or approval mechanisms; 3) Restrictions on the employment of foreigners as key personnel and 4) Other operational restrictions. Restrictions are evaluated on a 0 (open) to 1 (closed) scale. The overall restrictiveness index is the average of sectorial scores.
2. The FDI Regulatory Restrictiveness Index reflects the situation at end 2016 for India and end 2015 for other countries.
3. Data for Costa Rica refer to the period 2012-15.
4. FDI net inflows are the value of inward direct investment made by non-residents net of repatriation of capital and repayment of loans.

Source: Reserve Bank of India; OECD FDI Regulatory Restrictiveness Index database; Brazilian Central Bank; and OECD FDI main aggregates database.

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Table 8. **Past OECD recommendations on foreign direct investment**

Recommendations	Actions taken since the 2014 Survey
Continue to reduce trade and FDI barriers, especially in services and network industries	• In May 2015, composite caps on foreign investment were introduced to bring simplicity and uniformity in FDI policy across sectors. • In November 2015, the threshold above which FDI requires government's approval in certain sectors was raised from INR 20 billion to INR 50 billion. FDI up to 100% is allowed in coffee, rubber, cardamom, palm, oil, olive tree plantations, defence, civil aviation and broadcasting. For foreign investment in private banks, a 74% sectoral cap applies provided that there is no change in management and control. In the insurance sector, the 26% cap was lift to 49%. In the pension sector, FDI is permitted up to 49%. For railways, 100% FDI is permitted for specific construction, operation and maintenance activities. • In May 2016, the government allowed up to 100% FDI in Asset Reconstruction Companies. • In June 2016, the government allowed: i) 100% FDI under the government approval route for trading in food products manufactured in India; ii) FDI above 49% in the defence sector is now permitted through the government approval route dropping the clause requiring access to 'state-of-the-art' technology; iii) 100% FDI in broadcasting carriage services, under the automatic approval route; iv) 74% FDI in brownfield pharmaceutical projects under the automatic route; v) 100% FDI under the automatic route for brownfield airport projects; vi) 100% FDI in scheduled air transport service (FDI up to 49% will be under the automatic route, above this threshold government approval will be required); vii) 74% FDI in private security agencies (government approval for FDI above 49% will be required); viii) 100% FDI under automatic route is permitted in airport projects; ix) Relaxation of local sourcing norms up to eight years for single brand retail.

Andrews, 2016). The full implementation of the Code will likely require increasing judicial resources and improving the judicial machinery to reduce delays (Sengupta and Sharma, 2016; Regy et al., 2016).

As a major pillar of the *Make in India* initiative, the central government has taken many measures to improve the ease of starting and operating a business (Table 9) – including an online system for VAT registration and payment for various taxes, self-certification schemes, online submission of applications for environmental clearances and construction permits – and reduced registration fees. The *Start-up* India initiative launched in August 2015 has further simplified administrative processes and provided financial support and tax relief for newly-created enterprises. Simplifying regulations and administrative process also contributes to reducing corruption. Overall, India's ranking in the World Economic Forum Global Competitiveness Index for 2016 improved 16 places to 39 while in the 2017 edition of the World Bank *Doing Business*, India's ranking improved to 130, from 131, on a group of 190. However, India still lags behind many emerging economies in terms of ease of doing business. A report submitted in December 2015 by the Standing Committee on Commerce recommended further reforms, in particular introducing a one single window for construction permits, fastening the pace of digitising land records, implementing a stable, fair and predictable tax regime in the country and designing environment clearance in a way that the Ministry responds in a time bound manner (PRS, 2016).

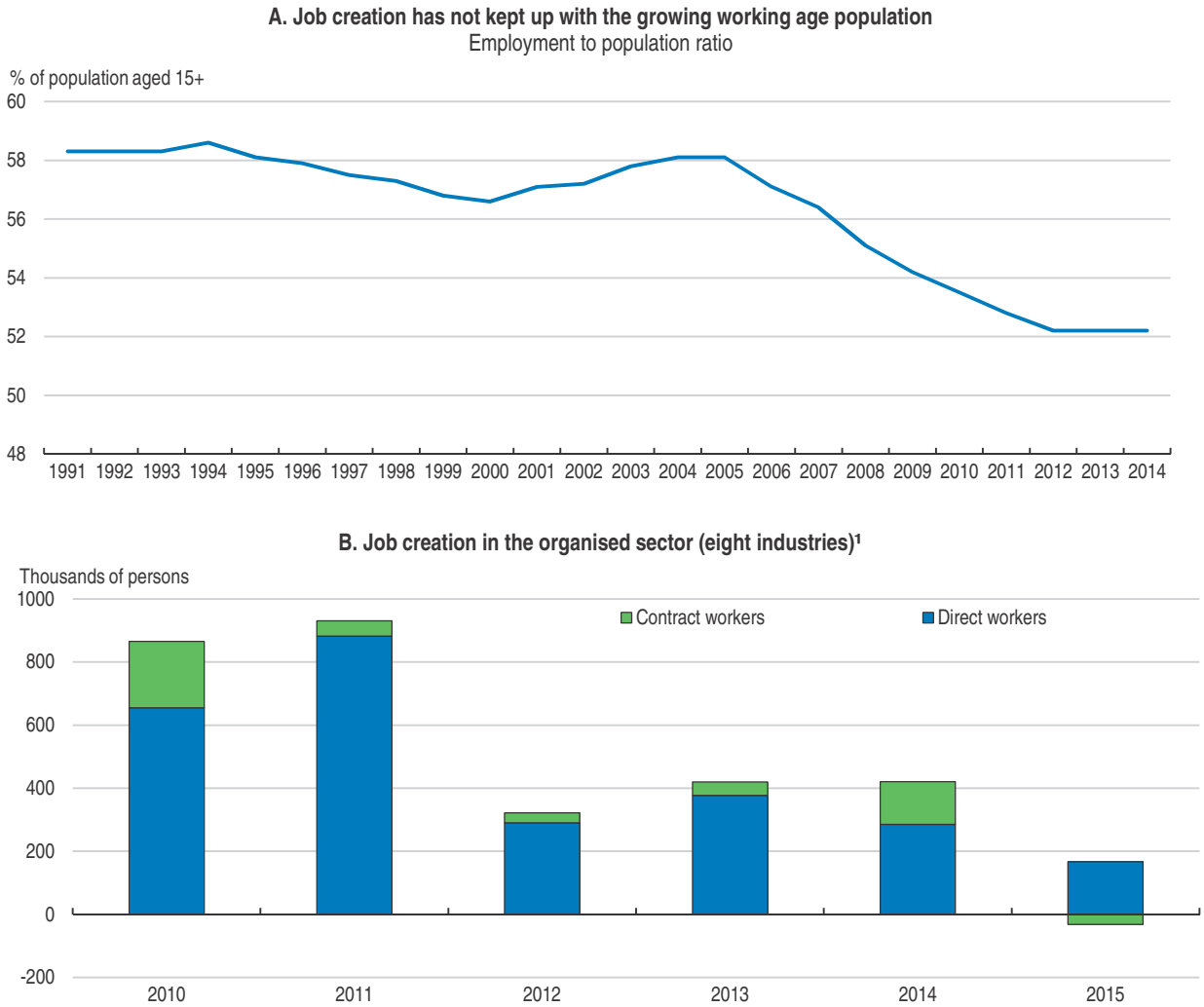
Table 9. **Past OECD recommendations on improving the business environment**

Recommendations	Actions taken since the 2014 Survey
Further simplify regulations and reduce administrative burdens on firms.	Many measures have been taken to improve the ease of doing business and of starting a business at the central government and state level.
Introduce a modern bankruptcy law	A new bankruptcy Code was passed in May 2016.

Creating more and better jobs

India creates too few quality jobs to meet the aspiration of its growing workforce, leaving many people under-employed, poorly paid or outside the labour force. Despite strong economic growth, the employment rate has declined (Figure 17.A), the participation rate of women is low (OECD, 2014) and job creation in the organised sector has plummeted since 2010 (Figure 17.B). However, assessing labour market trends is made difficult by poor employment data, with information for total employment available only every five years (last NSSO round in FY 2011-12) and with a lag. Since 2008, the government carries out quarterly surveys on employment in the organised sector for eight industries; as of December 2016, the latest available data covered the last quarter of 2015. The Labour Bureau also conducts quarterly and annual employment/unemployment surveys since 2010 with data up to 2015. Ensuring that up-to-date data are available would provide key tools to improve policymaking.

Figure 17. **Too few jobs are created**



1. The organised sector consists of enterprises with more than 10 workers (more than 20 if not using electricity). Contract workers are not covered by social insurance systems. The industries surveyed are: textiles including apparels; leather; metals; automobiles; gems and jewellery; transport; IT or BPO; and handloom and powerloom.

Source: World Bank; and Labour Bureau of the Government of India.

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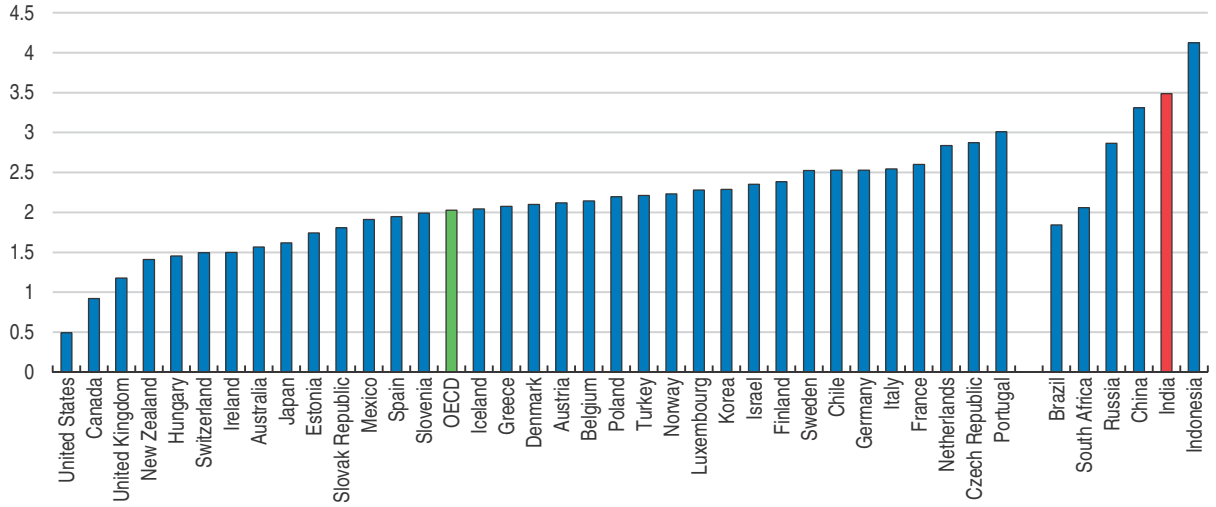
Inequalities in wages and in social and labour law coverage are large. Household surveys (NSSO) reveals that only one third of all workers have a written job contract. The vast majority, particularly those in agriculture and the service sector, are not covered by core labour laws (Mehrotra et al., 2014). In manufacturing, the latest NSSO data suggest that in 2012 around 65% of jobs were in firms with less than 10 employees (the so-called "unorganised sector"), while most labour laws apply only to larger firms. In addition, larger firms tend to increasingly rely on temporary workers or workers contracted through an agency (so-called "contract" labour). The Annual Survey of Industries (ASI) point to an increase in the share of contract labour in the organised manufacturing sector from 15% in FY 1999-2000 to 26% in 2012-13, with a faster increase in states with more rigid labour laws (Government of India, 2016). A contract worker earns 29% less than a regular worker (ASI data). Likewise, in the education sector, contract teachers are paid a small fraction of the wage received by government regular teachers and are often paid with a delay (Béteille and Ramachandran, 2016).

Several factors contribute to the poor labour market performance. *First*: labour laws are complex and strict, especially for large industrial firms. Employment protection legislation (EPL) is particularly restrictive compared with both other EMEs and OECD countries, as firms with more than 100 employees are required to obtain prior government approval to dismiss one or more employee (Figure 18). The frequency of reinstatement orders in the case of unfair dismissal is high and long delays in resolving labour disputes (Bhattacharjea, 2009) add to uncertainty and indirect costs of labour. The minimum wage system is also one of the most complex in the world (Belser, 2013), as the imbrication of central government and state regulations results in a multitude of minimum wages. *Second*: the corporate income tax has created a bias against labour-intensive activities, although the cap on the capital depreciation tax allowance introduced in 2016 will help reduce this bias (Chapter 1). *Third*: social security contributions are capped and are mandatory below a given income threshold

Figure 18. **Employment protection legislation is stringent**[1]

2013



1. The OECD indicator of employment protection legislation (EPL) for regular employment measures the procedures and costs involved in dismissing individual regular employees. The indicator runs from 0 to 6, representing the least to most restrictive EPL. The last available data refer to 2012 for BRIICS countries and 2013 for OECD countries.

Source: OECD Employment Protection Database.

StatLink http://dx.doi.org/10.1787/888933453458

for firms with more than ten employees. They thus increase the cost of low-qualified jobs and discourage job creation. Overall, enterprises have reacted to labour and tax regulations by substituting capital for labour, staying small, or relying on contract labour.

The central government has recently taken steps to make labour regulations friendlier to job creation. It has reduced administrative requirements for complying with existing labour laws and increased transparency in the day-to-day interactions between firms and the administration. In particular, it launched a unified online portal (*Shram Suvidha*) for firms to report compliance with 16 central government labour laws and allowed a single self-certification under this scheme as well as transparent labour inspection processes. Labour registrations have been simplified and can now be made on the same portal. On the legislative side, the Apprenticeship Act was amended in December 2014 to increase the number of industrial sectors which can employ apprentices (Table 10). The government is also envisaging rationalising 44 central government laws into four labour laws. To reduce the pay gap between formal and informal labour, the central government introduced in 2016 a minimum wage of INR 10 000 (USD 148) per month for all contract workers (the 1970 Contract Labour Act is restricted to some activities).

In June 2016, to boost job creation, the government approved a special package, including paying the 8.33% employers' contribution to the pension system for new employees (restricted to those with a wage up to INR 15 000 per month), increasing overtime limits to 8 hours a week (in line with ILO norms), refunding the states levies and bringing in parity between the contractual and permanent workers in terms of wages and other compensation elements. For the labour-intensive garment industry, for women in particular, the government also pays the 3.67% contribution for the Employee Provident Fund. In addition, the government relaxed conditions for eligibility to tax concessions for the apparel sector – a sector where employment elasticity is high (Kantha, 2016) – so as to further promote job creation.

Promoting quality employment and reducing both labour informality and income inequality would require introducing a simpler and more flexible labour law which does not discriminate by size of enterprise, gender or job contract. The government proposed to regroup the multitude of labour laws into four Codes, to loosen employment protection legislation which requires firms to get government's approval for firing even one employee and to remove restrictions on women working "on certain machines in motion" and between 7:00 PM and 6:00 AM. These proposals have met considerable resistance.

As labour is a shared responsibility between central government and the states, some states have taken the lead in reforming labour laws. Rajasthan, a relatively poor state, has been the most ambitious recently in this domain (Chapter 2). Maharashtra and Tamil Nadu have allowed women to work night shifts. To help inform the policy debate, best policy practices across states should be identified, which would underpin competitive federalism. Information on employment, stringency of labour laws and the impact of labour reform at the state level should be improved.

Table 10. **Past OECD recommendations on labour regulations**

Recommendations	Actions taken since the 2014 Survey
Reduce barriers to formal employment by introducing a simpler and more flexible labour law which does not discriminate by size of enterprise.	Administrative requirements for complying with existing labour laws have been eased. The central government reformed the Apprenticeship Act. The proposal to regroup the multitude of labour into four Codes has not yet been passed. Several states have reduced the stringency of some labour laws.
Improve the timeliness, quality and consistency of labour market data.	No action taken

Improving education and skills

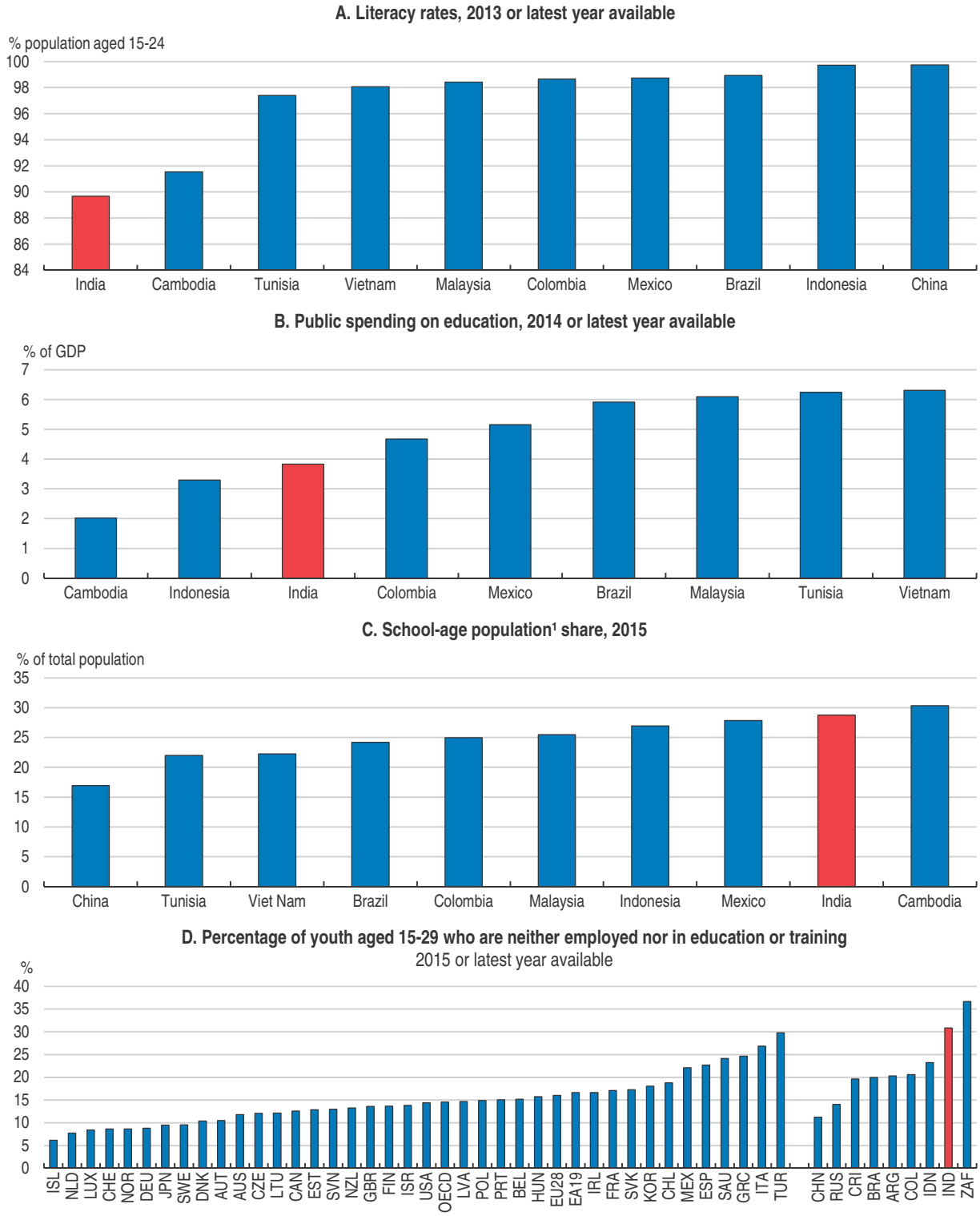
Improving the education and skill system is key to meeting the increasing needs for skilled workers which accompanies the shift away from agriculture. Efforts in this direction have been made since the early 2010s. In particular, India has succeeded in ensuring quasi-universal primary education after the Right to Education Law, which mandates free and compulsory elementary education to all children aged 6-14, came into force in 2010. Learning outcomes, however, are disappointing and have failed to improve. The 2014 Annual Status of Education Report (ASER, 2014) indicates that almost 50% of class 5 students in rural areas were not able to read basic sentences and more than 70% were unable to perform simple division. The literacy rate remains lower than in most other emerging economies (Figure 19.A). In addition, the attendance ratio drops sharply from primary to secondary education and inequality in access is large: less than 40% of the children from the poorest fifth of the population attend secondary schools, compared to 72% for the richest fifth of the urban population (71st round of NSSO's survey). The percentage of youth not in employment, education or training (NEET) is also high (Figure 19.D).

Equipping people with the right skills will require reducing barriers to higher enrolment rates in education and training systems. Household financial constraints play an important role. As an illustration, Arif and Chaudry (2015) provide evidence that in Punjab external remittances tend to relax household financial constraints, promote school enrolment and reduce dropouts. Likewise, financial incentives programmes experimented in various states have encouraged investment in daughters' education and health (Sinha and Yoong, 2009), suggesting that conditional cash transfers could boost enrolment and completion rates. The programme Pradhan Mantri Kaushal Vikas Yojana, launched in 2015, embodies a INR 8 000 financial reward for the youth taking up training courses from affiliated providers. The outcomes should be assessed and, if positive overall, the approach should be extended.

Meeting education needs will also require increasing resources spent on education and improving their effectiveness. New tertiary education institutions are being set up, including in the health care sector (Table 11). Still, at 3.8% of GDP, public spending on education is low, particularly so in view of the very high school-age population ratio (Figure 19.B and C). As an indication, the average pupil-teacher ratio in primary schools, at 32, is about twice the level in China and Indonesia. The quality of teachers also matters significantly (Azam and Gandhi Kingdon, 2015). Several studies suggest that contract workers – with short-term contracts and lower wages – put in greater effort and succeed in improving student performance better than civil service teachers with permanent tenure (Goyal and Pandey, 2013; Muralidharn and Sundararaman, 2011). While most teachers try to do a good job, a sizeable minority is disengaged. Duflo et al. (2012) suggest that linking teacher wages to attendance reduces teacher absenteeism and improves learning outcomes. Bolia and Jain (2016) reveal large disparities across states in transforming education inputs into cognitive skills, suggesting ample scope for improving efficiency if states would learn from each other and best practices be identified.

The 2015 National Skill Development and Entrepreneurship programme, which supersedes the 2009 Skill Policy, envisages training 500 million people by 2022. Employer surveys indicate skills shortages in ICT, financial services, tourism, retail and skill-intensive manufacturing. In 2015, 58% of employers reported recruitment difficulties because of talent shortages (Manpower, 2015). Large sections of the educated workforce have little or no job skills, making them largely unemployable (National Employability

Figure 19. **Too low literacy rate and public spending on education to reap the demographic dividend**



1. Population aged 5-19.

Source: World Bank, World development indicators database; OECD Employment Outlook 2016; and United Nations Population Division.

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Table 11. **Past OECD recommendations on education and training systems**

Recommendation	Actions taken since the 2014 Survey
Continue improving access to education, especially at the secondary level, and better focus on the quality of education at all levels.	The Rashtriya Aavishkar Abhiyan was launched to increase resources and improve teacher training to motivate and engage children of the age group 6-18 years in science, mathematics and technology. New Indian Institutes of Technology (IIT), Indian Institutes of Management (IIM) and Medical colleges are being established.
Provide better and earlier vocational training	The Pradhan Mantri Kaushal Vikas Yojana programme launched in 2015 aims at providing job skills and certifying 10 million young people and includes a financial reward for trainees

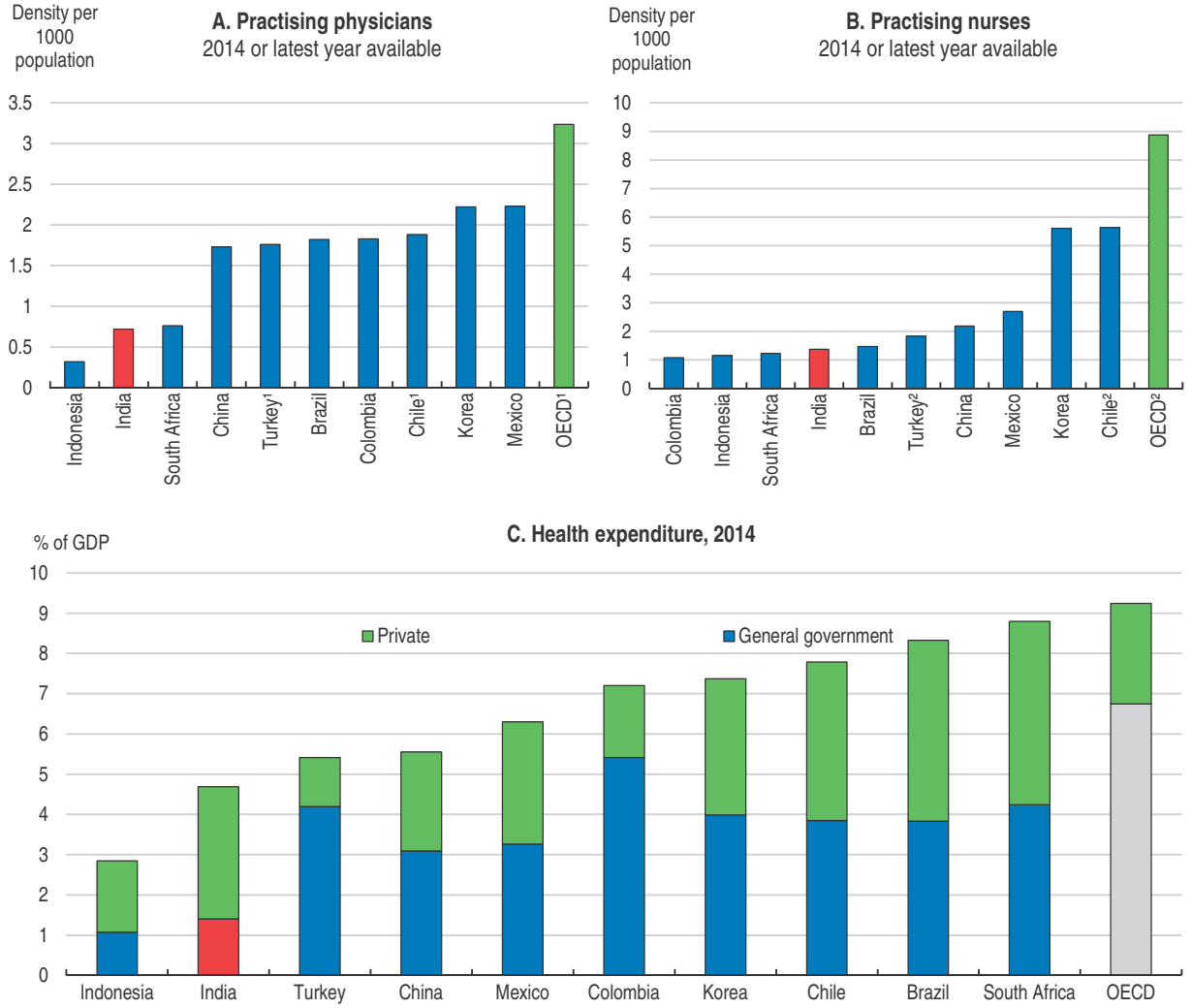
Report: Aspiring Minds, 2016). It is estimated that only 4.7% of the total workforce has undergone formal skill training, much less than in China or South Korea (Government of India, 2015b, Mehrotra et al., 2015 and Wheebox, 2016). To improve population skills, vocational training should be introduced earlier in the school curricula. The government objective of introducing vocational training classes linked to the local economy from class nine onwards in at least 25% of the schools, over the next five years is welcome but should be more ambitious, both on coverage and timing. Local industry participation in designing training programmes would also help to better match industry needs.

Better supporting the poor and vulnerable

India has taken millions of people out of poverty. However, access to core public services is incomplete and highly spatially concentrated. India's population coverage for water provision, sanitation and electricity has improved but remains low by BRIICS country standards. Some states do better however, suggesting that there is scope for experimentation and the sharing of good practices across states. As an illustration, while almost 20% of the Indian population has no access to electricity, some states have succeeded in achieving near universal provision, including Gujarat, Karnataka and Maharashtra. Despite efforts aimed at improving public services in rural areas, such as the National Health Mission, deprivation in core public services is much higher in rural than urban areas, with a particularly marked rural/urban divide for electricity, sanitation and health.

Public resources invested on health care are low and inequitably distributed across and within states. India spends only 4% of GDP on health care – less than half of that in Brazil and South Africa – and out-of-pocket payments account for the bulk of that. The number of doctors and nurses is low (Figure 20) and the number of medical colleges tends to be lower in populous states with poor health (OECD, 2014). To reduce the rural/urban divide, community centres have been built in rural areas. However, there has been an alarming decline in the number of trained medical staff and specialists, with vacancies of up to 80% in village services (Lancet, 2015). Reforms recommended by a parliamentary committee to raise the number and quality of medical colleges have not been implemented (Sharma, 2016). Although the draft National Health Policy by the government tabled a commendable reform agenda and proposed increasing public spending on health care from 1% to 2.5% of GDP by 2020 (Government of India, 2014; Duggal, 2016), the budget for FY 2016-17 has not significantly increased resources for the health care sector.

Figure 20. **Financial and human resources in the health care sector**



1. Data for Canada, France, Greece, Netherlands, Slovak Republic and Turkey include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. Data for Chile refer to all doctors licensed to practice.
2. Data for Austria, France, Greece, Iceland, Ireland, Italy, Netherlands, Portugal, Slovak Republic, Turkey and United States include not only nurses providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. Data for Chile refer to all nurses who are licensed to practice (less than one-third are professional nurses with a university degree). Austria reports only nurses employed in hospital.

Source: World Health Organisation; and OECD Health care resources database.

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The on-going subsidy reform could serve as best practice for other countries

India has long relied on price subsidies for food, fertiliser, oil, kerosene, water, electricity, railways and many other products, to guarantee poor households' access to essential products and protect them from price fluctuations. For kerosene, subsidisation also reduce incentives to use cheaper alternates, like biomass, for cooking and lighting, which have serious adverse impacts on the environment and health of those exposed, often the poorest. The fiscal cost, at 4.2% of GDP, is high (Government of India, 2015a). Subsidies also tend to benefit the rich most – electricity and water subsidies are particularly regressive since many poor households are not connected. Furthermore, subsidies have been misused, triggered corruption, and resulted in excess consumption for some products with adverse environmental costs, e.g. electricity and water.

To improve the effectiveness of welfare programmes, India is implementing an ambitious reform. The government has extended and accelerated the move from price subsidies to direct benefit transfers (DBT) in cash, supported by a personal identification number linked to each individual's biometrics (Aadhaar) and bank accounts. The first Aadhaar number was issued in September 2010, and around 1.1 billion citizens and 86% of the population had a number as of December 2016. More than 285 million bank accounts were linked to an Aadhaar number. The government has also enabled mobile-based transactions to guarantee connectivity even in rural areas. While the DBT scheme covered mainly scholarship and pension programmes, the government has brought additional welfare payments under the ambit of the DBT since 2014, including cooking gas subsidies and the national rural employment guarantee scheme (NREGS). Several experiments have also been launched in various states to extend further the DBT coverage, including for the food subsidy. In addition, the government seized the opportunity of declining oil prices to eliminate diesel subsidies in 2014.

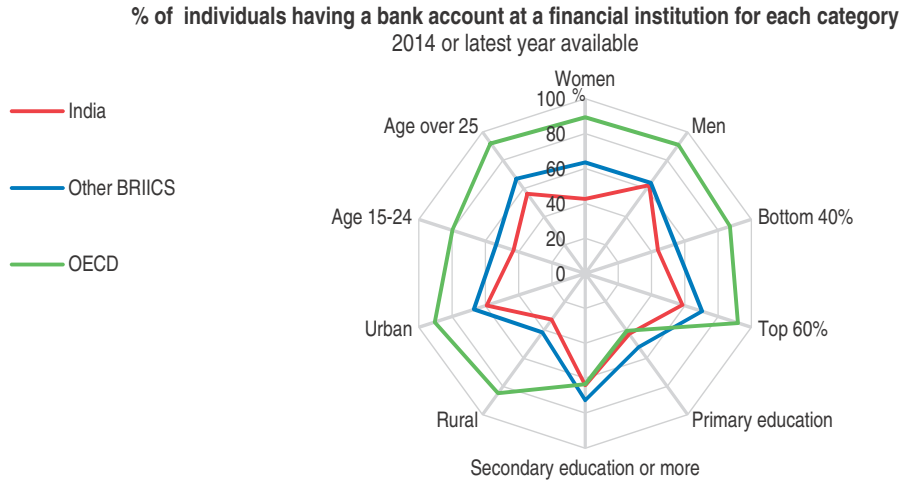
DBT accelerates payments, lowers transaction costs and leakages, and better targets welfare programmes. Recent changes in cooking gas subsidies provide an illustration. The government launched the DBT scheme for gas in the entire country in 2015. Since then, all gas cylinders are sold at the market price and the implicit subsidy is transferred directly to consumers' bank accounts. This move allowed weeding out almost 140 million dubious beneficiaries, reducing the subsidy cost significantly. It has also helped ensure that the poor receive as much as the rich. A campaign asking the rich to voluntarily opt out from the implicit gas subsidy ("Give it up") was launched in autumn 2015. Instead of the opt-out approach, the government could ask consumers to opt in for the subsidy by certifying that their household income is less than a set amount – studies have revealed that choice of default options can have a significant impact on consumer behaviour (Tripathi et al., 2015). A similar approach should also be used for other products, in particular fertilisers, water, and electricity. Ensuring that compensation paid to banks for implementing DBT is adequate is important to support the move.

Financial inclusion is progressing

Disparities in access to formal financial institutions have long been particularly severe in India. Gender, income, educational background and location have been key determinants (Figure 21). According to the 2011 Census survey, more than 40% of households (i.e. over 100 million households) had no bank account, and 67% in rural areas. A large number of the poor relied on expensive informal sources. Out of every 100 marginal farmers, more than 60 have contracted debt from money lenders and less than 13 from banks, with 85% of their outstanding loans from non-institutional sources (Chapter 2).

Ambitious initiatives have been launched to enhance financial inclusion and empower the poor. In August 2014, the government launched the Pradhan Mantri Jan Dhan Yojana (PMJDY) which enables individuals to open bank savings account with no minimum balance requirements, a debit card, an overdraft facility of INR 5 000 per household, as well as an accident and life insurance. As of November 2016, around 255 million bank accounts were opened, with over 54% of them accompanied by an Aadhaar number and a balance of over INR 456 billion under the scheme. The move from price subsidies to direct benefit transfers is also promoting the use of bank accounts. India also combines financial education and financial inclusion campaigns to help people manage money more

Figure 21. **Impact of individual characteristics on financial inclusion in India and other BRIICS**



Source: World Bank, Global Findex Database.

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effectively. Financial literacy initiatives have been conducted through various channels, including schools, roadshows, pamphlets and films (Atkinson and Messy, 2013).

To ease funding problems faced by small businesses, the government launched the Pradhan Mantri Mudra Yojana in 2015. It grants loans of up to INR 1 million (USD 15 500), without any collateral, at reduced cost by providing refinancing at a relatively low interest rate. In 2015 the RBI also granted licences for ten small finance banks that offer loans to small businesses and farmers and accept deposits – 8 of the 10 entities are microfinance institutions, which so far in India cannot collect deposits. Small finance banks will further be given the possibility of graduating to universal banks after a few years. To improve access to financial services for the poor, the RBI granted new conditional licences for eleven "payment banks" in 2015 – these banks can collect deposits up to INR 100 000 (USD 1 550), provide debit cards and internet banking services but cannot give loans – although three applicants had opted out as of June 2016.

Despite efforts, various factors still constrain financial inclusion. India has long relied on banks to give access to financial services to the poor. Although branch expansion – one for every village with more than 2 000 inhabitants – has reduced rural poverty in rural areas (Burgess and Pande, 2005), the cost is high, calling for more cost-effective approaches. A committee set up by the RBI to prepare a 5-year financial inclusion plan, has argued in favour of low-cost technology approaches, in particular mobile phones and business correspondents, for last-mile delivery of bank services. The launch of the unified payment interface in 2016 will speed up the move to cashless and mobile phone transactions. It will also make it easier for small businesses to have a banking track record and thus increase their chances of getting a loan. To improve credit access to agriculture, the RBI committee urged to complete digitization of land records by the states, so as to allow land to be used as collateral. To prevent over-indebtedness, the RBI committee proposed linking all credit accounts to a unique biometric identifier, such as Aadhaar number, to identify multiple accounts. To promote further financial inclusion, India should consider allowing microfinance institutions to collect deposits and offer savings accounts, following Bangladesh with the Grameen bank.

Table 12. **Past OECD recommendations on programmes to better support the poor and vulnerable**

Recommendations	Actions taken since the 2014 Survey
Extend the direct benefit transfer to core subsidy programmes and use the unique identification number.	Cooking gas subsidies were converted into a cash benefit. The extension of the unique identification number has proceeded swiftly.
Increase public spending on health care with particular focus on preventive and primary care, especially in rural areas and urban slums	In the Budget for FY 2016-17 a New Health Protection Scheme was announced to provide health and disability insurance up to INR 100 000 per family for economically weak families. For senior citizens of age 60 and above belonging to this category, an additional top-up package up to INR 30,000 will be provided.

Achieving strong and balanced regional development

Spatial inequalities are sizeable, with large differences in poverty rates, access to public services and output per capita both across states and between urban and rural areas. The share of the population living on less than USD 1.90 a day (at 2011 prices) has declined, thanks to strong growth. However, the income gap between the richer and poorer states has widened (Figure 22.B). Some low-income states (including Bihar and Rajasthan) have recently developed more rapidly than high-income ones, suggesting that good policies matter. Also, some states have succeeded bringing the poverty rate below 10% – Kerala and Sikkim stand out, with a low poverty rate (Figure 22.C) despite their relatively low GDP per capita.

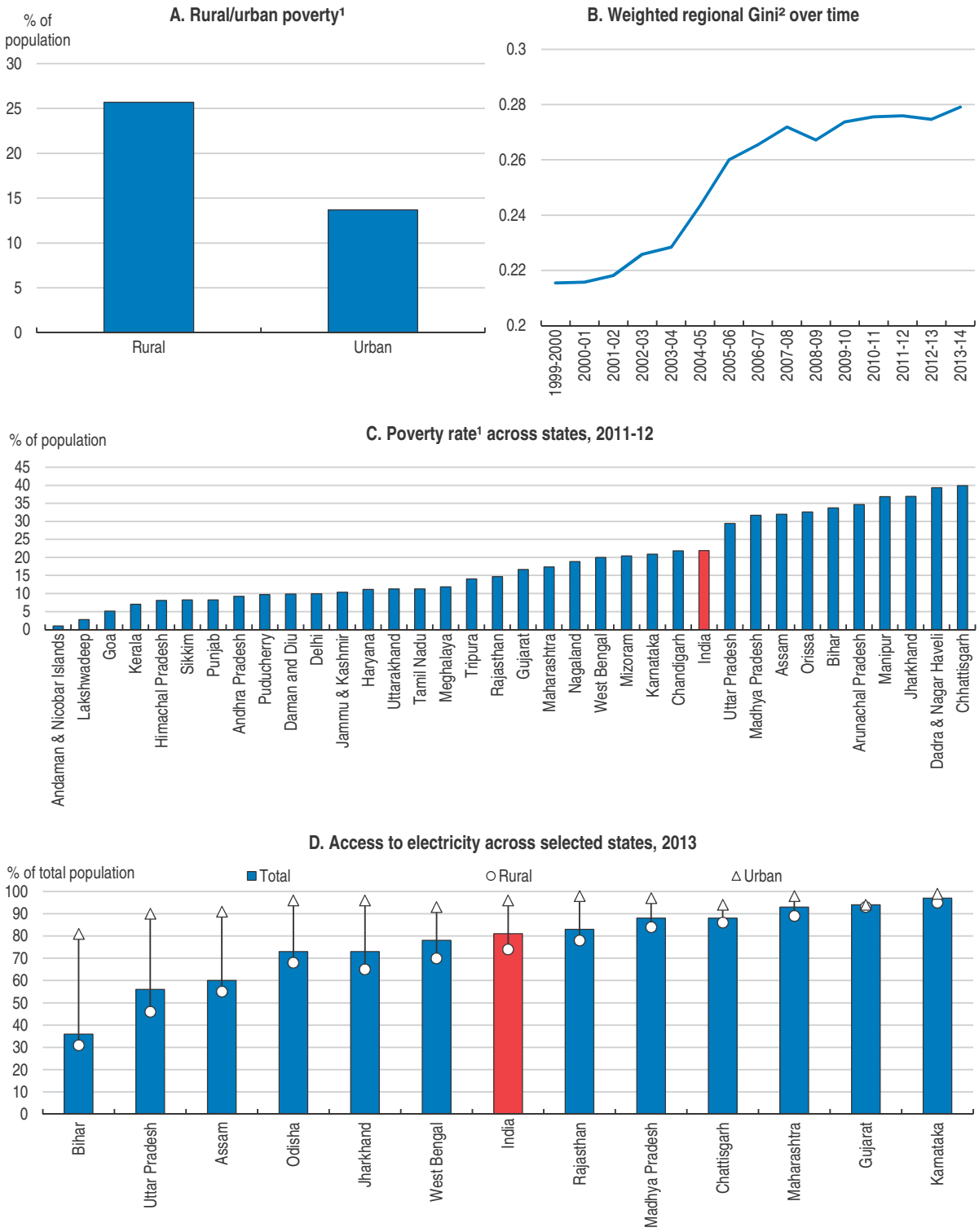
Rising GDP disparities are no fate; they depend on a country's intergovernmental framework and can be tackled by policy (Blöchliger et al., 2016). States have significant spending responsibilities. Product market regulations, except those related to trade and FDI, as well as various labour regulations are largely set and implemented at the state level. The recent replacement of conditional grants by a larger tax share has given more autonomy to the states to adjust policies to local circumstances while efforts to publicise data on the ease of doing business at the state level have strengthened incentives to pass reforms. The newly created NITI-Aayog acting as a think-tank is helping to share best practices across states. All these initiatives should help India to get the most out of federalism. More could however be done to achieve a strong and balanced regional development.

Raising productivity in the agricultural sector to reduce rural poverty

Disparities in GDP per capita across states and between urban and rural areas largely reflects the activity mix, in particular the agriculture share in output. Agriculture still accounts for almost half of total employment but contributes just 18% of GDP. Many agricultural inputs have been heavily subsidised in India, including fertilisers, electricity, water and loans. In particular, fertiliser (urea) subsidies amounted to 0.5% of GDP in FY 2014-15, resulting in very high and imbalanced use of fertilisers, polluting soils and water resources, and in misuses (*e.g.* smuggling). Likewise, subsidised electricity for farmers have led to unrestrained exploitation of ground water, contributing to water stress – an important issue in India. Meanwhile, the average yield for cereals has remained low compared to peer countries (Figure 23) and the low agricultural productivity is contributing to a very high level of poverty in rural areas.

The average farm size is small, with more than two-thirds of Indian farmers operating on a less than one hectare land plot. The fragmentation of land holdings continues, due to inheritance practices, deterring mechanisation and productivity gains. To promote farm consolidation, the National Land Records Modernisation Programme, including the digitisation of land records, should proceed more rapidly, following the lead of some states,

Figure 22. **Spatial disparities are large**



1. Poverty is computed by using Tendulkar methodology on the basis of a mixed reference period. The poverty line has been expressed in terms of monthly per capita consumption expenditure.
2. The regional Gini index is a measure of inequality in GDP per capita across regions (states in India). It takes values between 0 and 1 – zero when all regions have the same GDP per capita. Each region is given a weight corresponding to its population size.

Source: Reserve Bank of India; NSSO; and IEA World Energy Outlook 2015.

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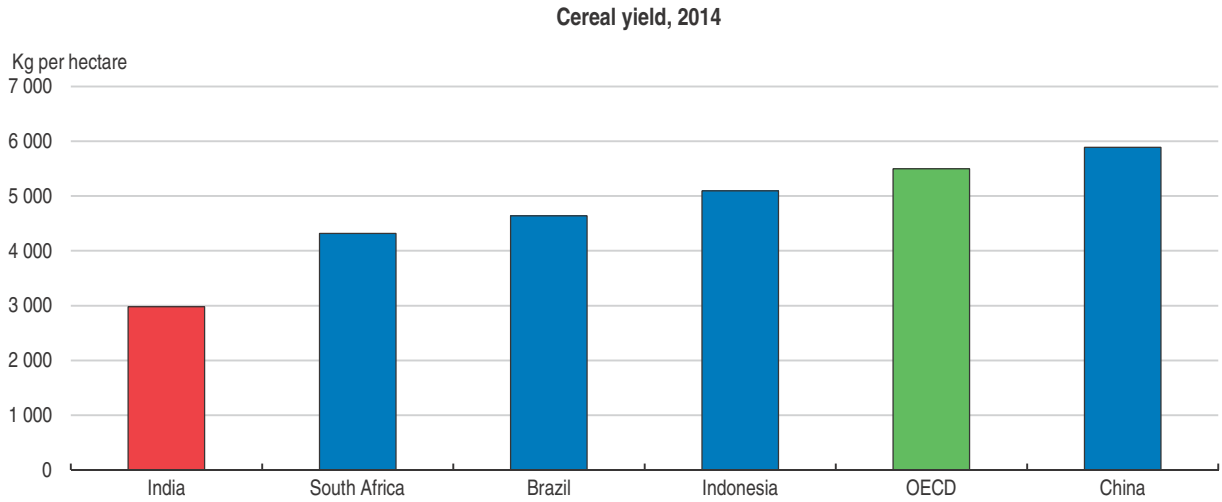
Figure 23. **Low productivity in the agricultural sector**



Source: World Bank World Development Indicators.

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including Andhra Pradesh and Rajasthan (Gulati and Banerjee, 2015; RBI, 2015). To further promote mechanisation, some states – including Madhya Pradesh and Punjab – are supporting custom hiring centres which rent out machinery to small and marginal farmers. The impact of states' experimentation to reduce land fragmentation and promote farm mechanisation should be assessed and made public so as to promote best practices.

Easing farmers' access to agricultural markets and reducing the fragmentation of agricultural produce markets would also raise productivity and farmers' income. Currently, the first sale of key agricultural commodities can only be conducted through state licensed agents – around 2 477 principal regulated markets based on geography have been identified (GoI, 2015a). In addition, various taxes and fees are levied on transactions, creating a large wedge between farmers' payments and consumer prices. Some states (including Karnataka) have partly deregulated farmers' access to market. The impact should be assessed and publicised to press for reform in other states. The central government also works with states to re-orient their respective Agriculture Produce Market Committee (APMC) Acts and to provide for establishment of private markets. State governments are encouraged to develop farmer markets in town areas to enable the farmers to sell their produce directly. Better storage and transport infrastructure would help to create a national market for agricultural products.

States have an important role to play to promote productivity in the manufacturing sector

Policy has a role to play in supporting the reallocation of resources from the agricultural to higher-productivity sectors. The 2014 *OECD Economic Survey of India* showed that the manufacturing sector contributed little to income and job creation as it suffered most from structural bottlenecks, including frequent power outages, below par transport infrastructure, complex administrative requirements, high taxation and stringent labour regulations.

Product market regulations, except those related to trade and FDI, are largely set and implemented at the state level. Empirical works by the OECD Secretariat suggest that stringent barriers to entrepreneurship have kept firms below their optimal size, weighing on productivity (Joumard et al., forthcoming B). Some states have front-run in reducing these

barriers. If all states were to lower barriers to entrepreneurship to the level observed in the best performing ones, labour productivity in the organised manufacturing sector would increase by almost half. Reducing regulatory and administrative opacity is of particular importance.

Reform at the state level has been boosted by the new approach to federalism, stimulating local experiments and the identification of best practices. In 2014, the government launched an information system on state regulations and administrative practices, allowing the ranking of states in terms of the ease of doing business. A 98-point action plan for business reforms was agreed by state governments (KPMG, 2015). Progress in implementing reform is published, triggering competition across states. Efforts have been made to cut red tape, make it easier to comply with tax regulations (in particular online registration, filing and payment) and self-certification schemes for labour regulations have been implemented.

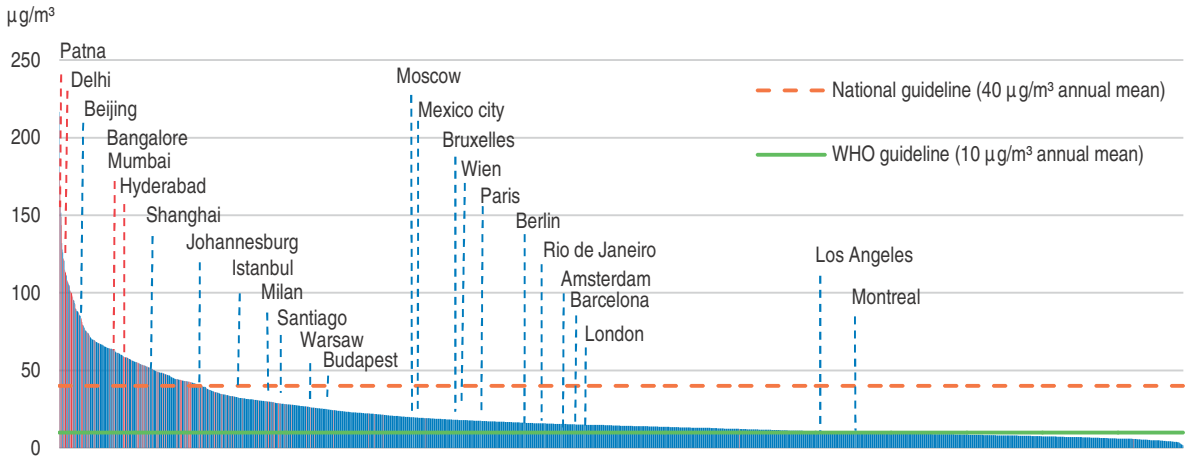
Getting the most out of urbanisation

A country's productivity is to a large degree determined by its cities' productivity, with productivity rising with city size (OECD, 2015a). Agglomeration economies reflect thicker labour markets, provision of specialised inputs and knowledge spillovers. With around 70% of India's population still living in rural areas, potential productivity gains associated with urbanisation are high. However, in India, data from the World Bank Enterprise Survey reveal that productivity declines with city size, suggesting that congestion costs quickly exceed agglomeration benefits.

The urbanisation process has been dominated by urban sprawl more than by an increase in urban density, with new urban areas often lacking basic infrastructure and public services such as water provision and sanitation, water draining systems in case of floods, and public transport (World Bank, 2013). Poor connectivity, fragmented labour markets and a lack of co-ordination in land-use planning and infrastructure provision weigh on agglomeration benefits. The lack of effective public transport system results in long commuting times, increasing reliance on private motorised vehicles, and very high local air pollution (Figure 24, Box 6).

Figure 24. **Air pollution in cities**

Average annual particulate matter concentration in selected cities, 2014



Note: Indian cities are marked in red. The other selected cities are marked in blue.

1. PM2.5 refers to particulate matter less than 2.5 micrometers in diameter; these fine particles are particularly damaging to health as they can penetrate deep into the lungs when inhaled.

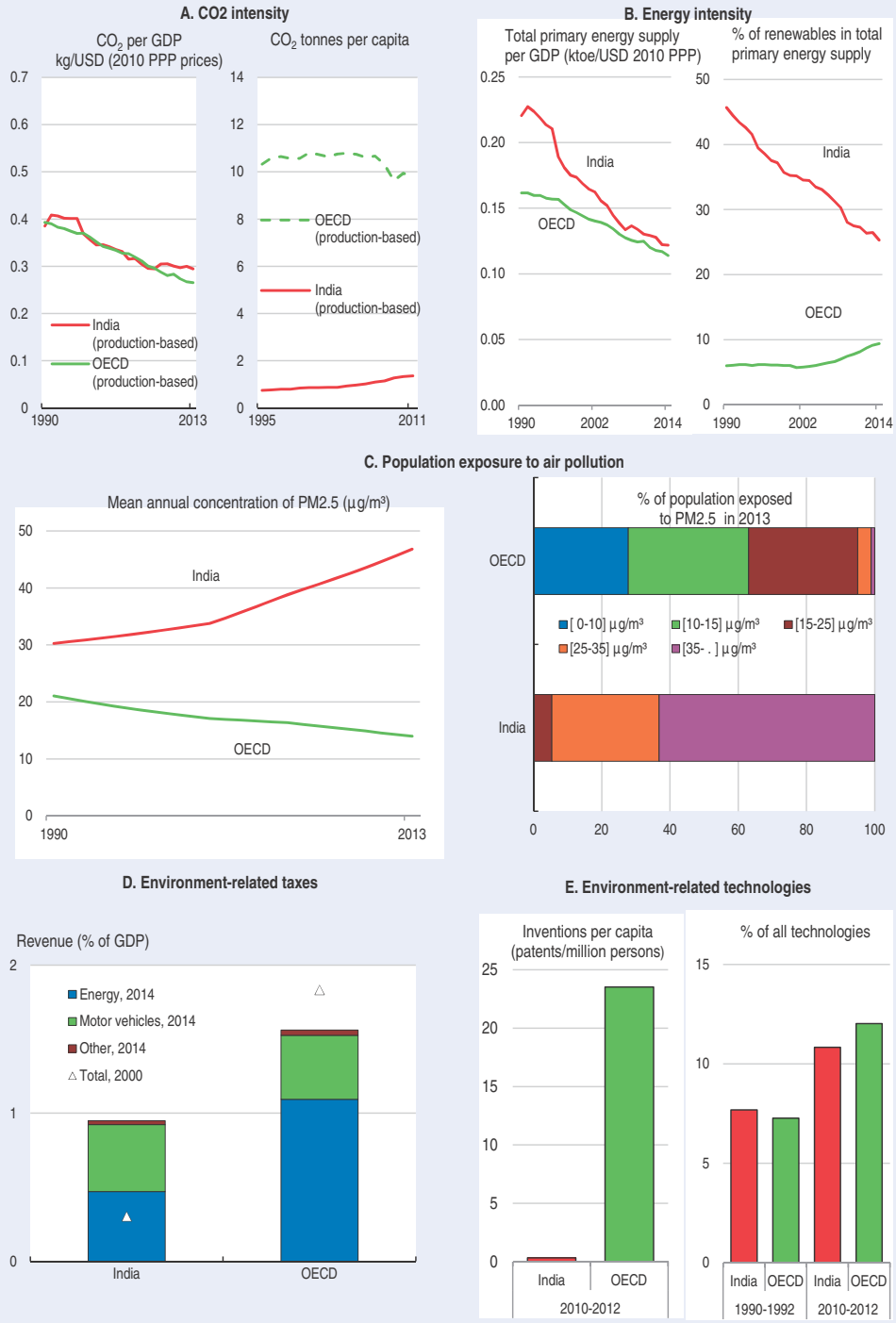
Source: WHO, Ambient Air Pollution Database, May 2016.

StatLink http://dx.doi.org/10.1787/888933453515

Box 6. **Green growth challenges**

India has very low per capita emissions of greenhouse gases and CO_2 emissions per unit of GDP have declined over the past 25 years. However, total CO_2 emissions are increasing rapidly as growth has edged up (Figure 25).

Figure 25. **Green growth indicators for India**



Source: OECD (2016), Green Growth Indicators database. For detailed metadata *click here*.

StatLink http://dx.doi.org/10.1787/888933453525

Box 6. **Green growth challenges** *(cont.)*

The share of renewables in the energy mix has been relatively high in the past, due to the widespread use of firewood and other biomass for cooking, still prevalent among 85% of rural households in 2011 (Government of India, 2016a), though much diminished in urban areas. Biomass still provides about one quarter of total primary energy supply (TPES), nuclear hydro and other renewables representing only about 3% of TPES.

Water is crucial for food supply as the green revolution in India was achieved partly due to massive increases in the irrigated area. This has led to depletion of groundwater in some areas, and competition with other water uses. The supply of piped water to urban households is growing fast but largely just keeping pace with urban population growth, while even primary water sewage treatment is rare so that many water courses are highly polluted for parts of the year.

Air quality is frequently very bad, associated with industrial and traffic pollution as in many countries but also, largely unknown in OECD countries, with use of biomass for household cooking in many areas, as well for heating in some, leading to high levels of indoor pollution. This is a major cause of premature mortality (Smith et al., 2014).

Standardised data on waste generation are not available, but in Uttar Pradesh, for example, "more than 25% of the municipal solid waste is not collected at all; 70% of the Indian cities lack adequate capacity to transport it and there are no sanitary landfills to dispose of the waste. The existing landfills are neither well equipped or well managed and are not lined properly to protect against contamination of soil and groundwater." (Uttar Pradesh, Directorate of Environment, 2016).

Revenue from environmental taxes, expressed as a share of GDP, is well below that in most OECD countries, but (unlike most OECD countries) it has been increasing. About half comes from taxes on motor vehicles.

Measured by patenting activity, India devotes a similar, increasing, share of its R&D effort to environmentally-oriented activities as the average OECD country. The very low overall patenting activity per capita is perhaps a misleading indicator of the national effort, due to India's large population, but it remains quite low even when adjusted for population.

It is essential that urban infrastructure is upgraded to get the most out of urbanisation and improve the quality of life in cities. A High Powered Expert Committee set up by the Ministry of Urban Development estimated that meeting urban infrastructure needs would require increasing spending from 0.7% of GDP in FY 2011-12 to 1.1% over the next 20 years (ICRIER, 2011). The *Smart cities* mission launched in 2015 aims at making cities more efficient and liveable. In many cities, priority should be given to public transport, housing and water sanitation.

To upgrade urban infrastructure, municipal governments' responsibilities and revenue-raising powers should be clarified. For metropolitan areas with highly fragmented municipal bodies, an organisation with a clear focus on metropolitan issues to promote better co-ordination between land use and transport planning would help. Ensuring that mayors are directly elected and have a long enough term would improve political accountability. Local governments should also be given more and predictable financial resources. Enabling local governments to raise more revenue from real estate would help complement central government grants and private funding. This would require improving clarity in property ownership and giving local governments more autonomy in setting the tax base and rates and to enforce local taxes. Reliance on user charges, in particular parking fees and road pricing, should also be encouraged as they could raise more revenue while reducing private car usage and thus pollution.

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ANNEX

Follow-up to previous OECD policy recommendations

This annex reviews action taken on recommendations from previous Surveys. They cover macroeconomic and structural policy priorities. Each recommendation is followed by a note of actions taken since the November 2014 Survey. Recommendations that are new in this Survey are listed in the relevant chapter.

Monetary, financial and fiscal policy frameworks

Recommendations	Actions taken since the 2014 Survey
Implement flexible inflation targeting	Done in 2015.
Further ease restrictions on bond market investment by foreign institutional investors	No action taken
Strengthen bank supervision by early recognition of asset deterioration and stricter provisioning standards	The Asset Quality Review has been performed, requiring banks to better provision stressed assets. To reduce exposure of banks to large corporates, the amount that banks can lend to counterparty will be limited to a proportion of the banks' capital base from April 2019. Banks will also have to set aside higher provisions for large loans.
Wind down bank lending obligation to priority sectors and gradually reduce the proportion of government bonds required to be held by banks and institutional investors (statutory liquidity ratio)	The Statutory Liquidity ratio was reduced from 22% to 21.5%. Priority lending requirements have not been reduced.
Pursue fiscal consolidation while avoiding one-off measures and cuts in growth enhancing spending	Fiscal consolidation has taken place at the central government level.
Shift public spending away from energy subsidies towards investment in physical and social infrastructure.	Diesel subsidies were eliminated and cooking gas subsidies have been replaced by targeted cash transfers. Infrastructure investment has increased. Health care spending remains low.
Implement a national value-added tax (GST) with only limited exemptions	The bill was passed. The government aims at rolling in the GST from April 2017

Corporate income tax

Recommendations	Actions taken since the 2014 Survey
Reduce the extent of exemptions for corporate taxation	In the Budget for FY 2015-16, the government proposed lowering the CIT rate from 30% to 25% over a 4-year period while phasing out most tax exemptions. The FY 2016/17 Budget reduced the CIT rate for small and new manufacturing companies to 29 and 25%, respectively.
Ensure that tax incentives in the new SEZs are neutral between labour and capital-intensive projects which produce the same pre-tax return	Multi-year tax exemptions for exporters in special economic zones (SEZs) are to be subject of sunset clauses.

Infrastructure and land

Recommendations	Actions taken since the 2014 Survey
Impose clear timelines, rationalise documentation and implement single-window clearance for infrastructure projects	Coordination with the government and across government levels has been improved.
Improve the land registry. Assess and amend as needed the new land acquisition law. The government should review the timelines within the Bill and aim to make land acquisition faster	The central government approved an ordinance bill in December 2014 to amend the land acquisition law making it easier to acquire land in five key sectors (security and defence, infrastructure, power and affordable housing). The Bill eliminated the requirements of 80% consent from affected landowners and of a social impact study. The ordinance was re-issued three times up to September 2015. As the Bill could not be passed by the Parliament, the central government has encouraged state governments to experiment land reform. Several states have since passed land reforms. The Real Estate Bill passed in 2016 aims to introduce transparency and accountability in the property market. It establishes state level regulatory authorities and state level tribunals.

Foreign direct investment

Recommendations	Actions taken since the 2014 Survey
Continue to reduce trade and FDI barriers, especially in services and network industries	• In May 2015, composite caps on foreign investment were introduced to bring simplicity and uniformity in FDI policy across sectors. • In November 2015, the threshold above which FDI requires government's approval in certain sectors was raised from INR 20 billion to INR 50 billion. FDI up to 100% is allowed in coffee, rubber, cardamom, palm, oil, olive tree plantations, defence, civil aviation and broadcasting. For foreign investment in private banks, a 74% sectoral cap applies provided that there is no change in management and control. In the insurance sector, the 26% cap was lift to 49%. In the pension sector, FDI is permitted up to 49%. For railways, 100% FDI is permitted for specific construction, operation and maintenance activities. • In May 2016, the government allowed up to 100% FDI in Asset Reconstruction Companies. • In June 2016, the government allowed: i) 100% FDI under the government approval route for trading in food products manufactured in India; ii) FDI above 49% in the defence sector is now permitted through the government approval route dropping the clause requiring access to 'state-of-the-art' technology; iii) 100% FDI in broadcasting carriage services, under the automatic approval route; iv) 74% FDI in brownfield pharmaceutical projects under the automatic route; v) 100% FDI under the automatic route for brownfield airport projects; vi) 100% FDI in scheduled air transport service (FDI up to 49% will be under the automatic route, above this threshold government approval will be required); vii) 74% FDI in private security agencies, (government approval for FDI above 49% will be required); viii) 100% FDI under automatic route is permitted in airport projects ix) Relaxation of local sourcing norms up to eight years for single brand retail.

Improving the business environment

Recommendations	Actions taken since the 2014 Survey
Further simplify regulations and reduce administrative burdens on firms.	Many measures have been taken to improve the ease of doing business and of starting a business at the central government and state level.
Introduce a modern bankruptcy law	A new bankruptcy Code was passed in May 2016.

Labour regulations

Recommendations	Actions taken since the 2014 Survey
Reduce barriers to formal employment by introducing a simpler and more flexible labour law which does not discriminate by size of enterprise.	Administrative requirements for complying with existing labour laws have been eased. The central government reformed the Apprenticeship Act. The proposal to regroup the multitude of labour into five Codes has not yet been passed. Some states have reduced the stringency of some labour laws
Improve the timeliness, quality and consistency of labour market data.	No action taken

Education and training systems

Recommendations	Actions taken since the 2014 Survey
Continue improving access to education, especially at the secondary level, and better focus on the quality of education at all levels.	The Rashtriya Aavishkar Abhiyan was launched to increase resources and improve teacher training to motivate and engage children of the age group 6-18 years in science, mathematics and technology. New Indian Institute of Technology (IIT), Indian Institute of Management (IIM) and Medical colleges are being established.
Provide better and earlier vocational training	The Pradhan Mantri Kaushal Vikas Yojana programme launched in 2015 aims at providing job skills and certifying 10 million young people and includes a financial reward for trainees

Programmes to better support the poor and vulnerable

Recommendations	Actions taken since the 2014 Survey
Extend the direct benefit transfer to core subsidy programmes and use the unique identification number.	Cooking gas subsidies were converted into a cash benefit. The extension of the unique identification number has proceeded swiftly.
Increase public spending on health care with particular focus on preventive and primary care, especially in rural areas and urban slums	In the Budget for FY 2016-17 a New Health Protection Scheme was announced to provide health and disability insurance up to INR 100 000 per family for economically weak families. For senior citizens of age 60 and above belonging to this category, an additional top-up package up to INR 30,000 will be provided.

Thematic chapters

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Chapter 1

Making income and property taxes more growth-friendly and redistributive

Income and property tax reforms are crucial to promoting inclusive growth. The tax-to-GDP ratio is low, partly reflecting the relatively low income level and the high degree of informality. However, it also reflects narrow tax bases, due to a wide array of tax incentives, which distort the allocation of resources. The redistributive effect of the tax system is limited. Tax reforms should i) raise more revenue to finance much needed social and physical infrastructure while keeping public debt under control; ii) reduce inequality by increasing the redistributive effect of taxation; iii) promote productivity by reducing distortions in the allocation of resources which emanate from the corporate income tax; iv) boost job creation by eliminating the bias against labour-intensive activities; v) promote confidence, and thus investment, by improving clarity and certainty in tax rules and their implementation and vi) reinforce the ability of states and municipalities to provide key public infrastructure and services. This chapter presents the main characteristics of the tax system as well as the rationale and options for reform.

Main characteristics of the tax system

Tax revenue is low while social and development needs are large

Tax revenue of the central government and states stood at 16.9% of GDP in fiscal year (FY) 2015/16 – well below most OECD countries and emerging economies (Figure 1.1.A). In addition, many emerging economies derive revenue from commodities whereas India is a net commodity importer. Since the early 1990s, India's tax-to-GDP ratio has remained broadly constant. This has resulted in a relatively large fiscal deficit and has left little room to fund public investment (Figures 1.1.B and 1.1.C).

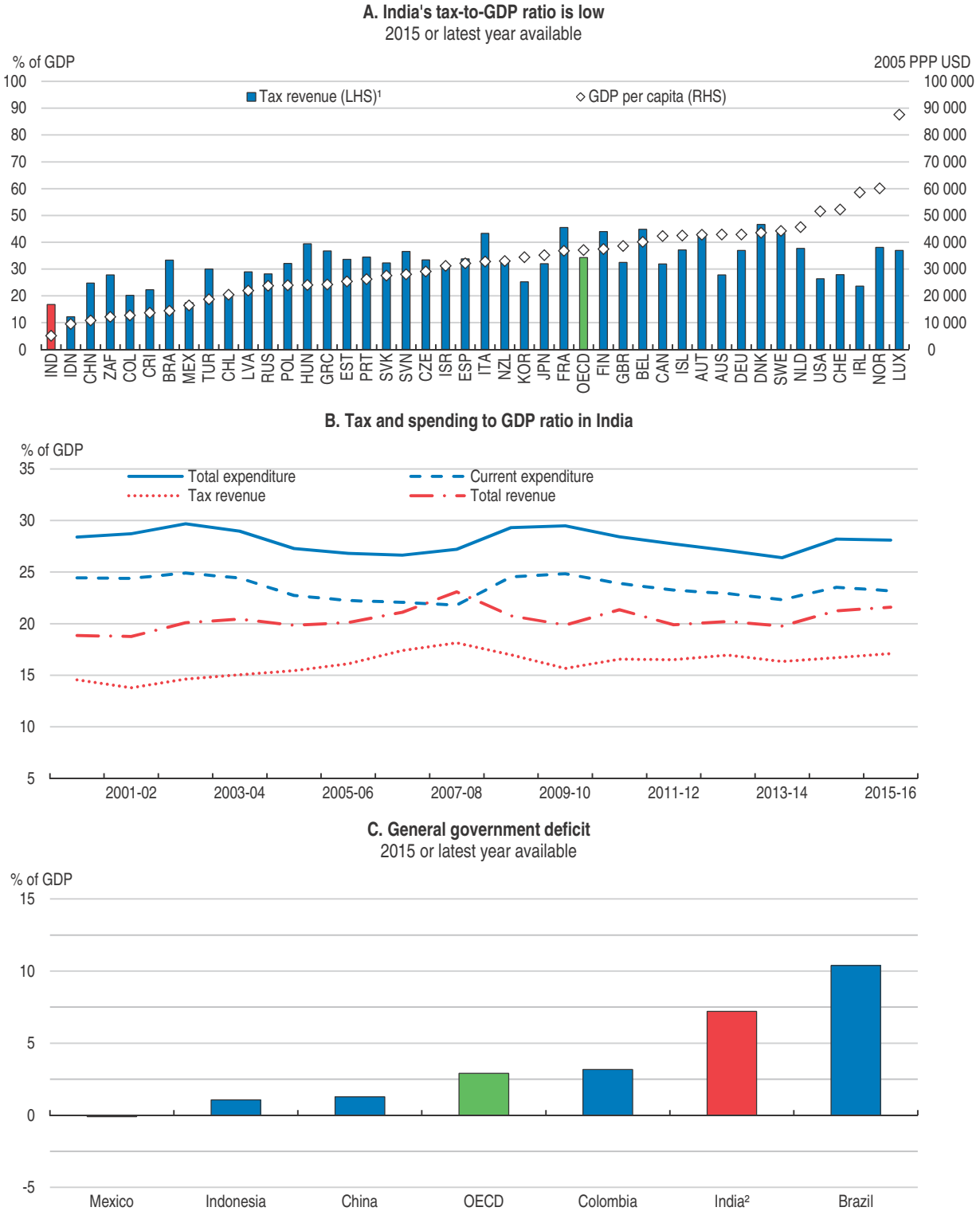
India needs to raise more tax revenue to finance much needed investment in social and physical infrastructure while bringing the already high debt-to-GDP ratio (68.6% in FY 2015/16) to a more prudent level. Spending on core public services is low, leaving a large part of the population un- or under-served. As an illustration, public spending on health amounts to about 1% of GDP, way below the level in other emerging economies, while only a very small fraction of the population is covered by a retirement scheme. Less than 40% of the population has access to sanitation facilities and one fifth is not yet connected to the electricity grid, with large variations across states and between urban and rural areas (see Chapter 2). In addition to reducing well-being, the lack of infrastructure – in particular electricity and transport – is also a major constraint on growth and on manufacturing in particular (OECD, 2014).

The current tax mix is inefficient

Taxes on goods and services account for the bulk of total tax revenue (Figure 1.2.A). They consist of value-added and sales taxes (levied at both the central government and state levels), customs duties, as well as a vast array of excise and other duties. These taxes are complex to comply with and involve tax cascading – i.e. taxes on inputs cannot be fully deducted from taxes on outputs – weighing on India's competitiveness. The long-awaited Goods and Services Tax (GST) reform will replace most of these taxes and redress the related inefficiencies (Box 1.1), although effective implementation will be key to its success. The GST is designed to be revenue-neutral, at least in the short term.

The amount of revenue raised through the corporate income tax (CIT) is high compared with other BRIICS and OECD countries (Table 1.1). The government announced a welcome reform in the 2015 Budget which will reduce the CIT rate from 30% to 25% and broaden its base. Some steps in this direction have already been taken (see below). Providing more certainty for potential investors regarding future tax rules, their interpretation and application, is also crucial to creating an attractive environment for foreign investment.

Figure 1.1. **Tax revenue is low**



1. Tax revenue includes social security contributions.
2. Data for India are revised estimates by the Reserve Bank of India for the fiscal year 2015-16.

Source: OECD Economic Outlook 100 database; OECD Revenue Statistics database; World Bank; Reserve Bank of India; Central Statistics Organisation.

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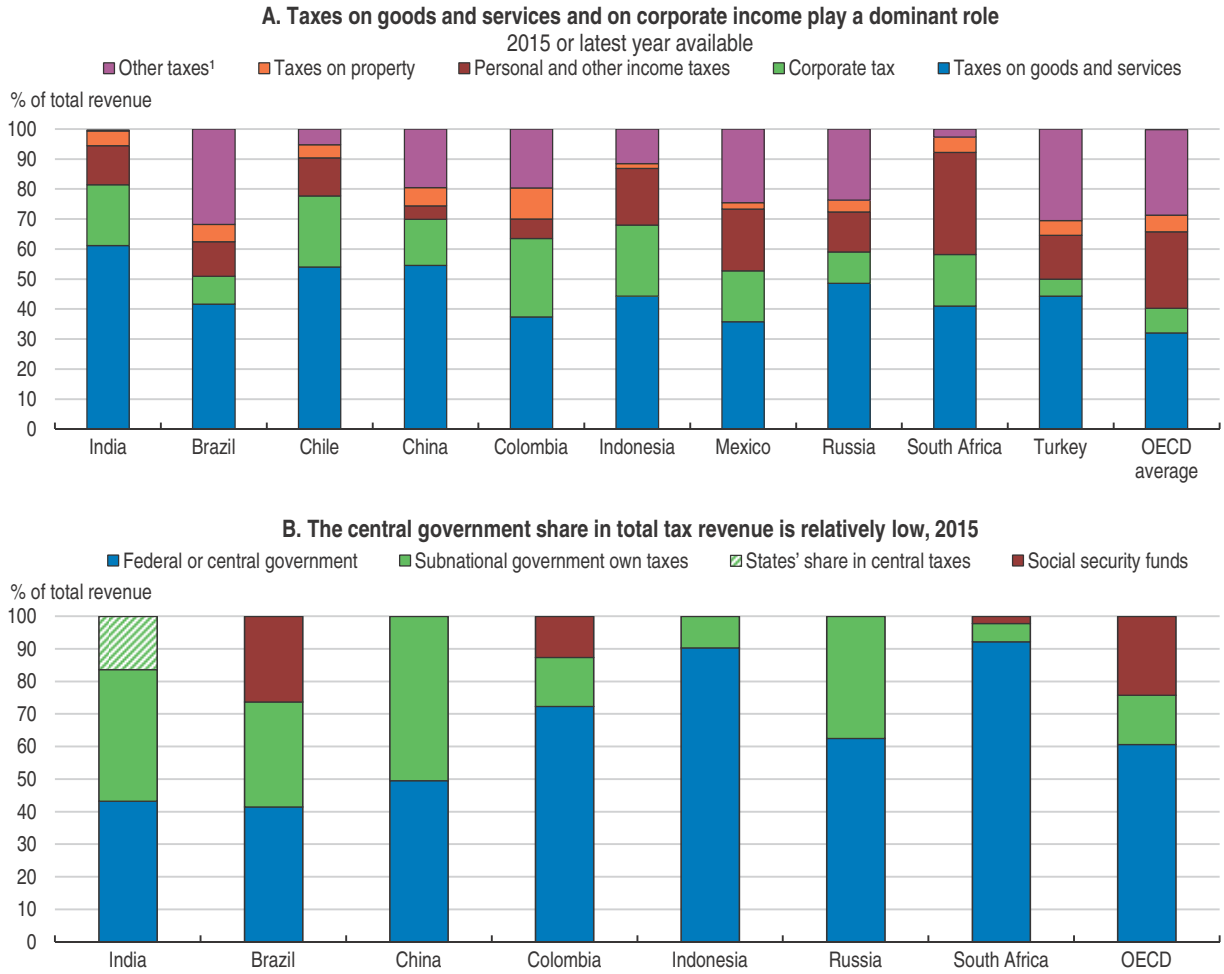
Figure 1.2. **The tax mix: indirect taxes and states' own taxes account for a large share**



1. Including social security contributions, taxes on payroll and workforce and other taxes.
Source: OECD Revenue Statistics database; Ministry of Finance of India; and IMF.

StatLink http://dx.doi.org/10.1787/888933453549

Box 1.1. **The Goods and Service Tax (GST) bill**

Key objectives of the GST

The GST will replace various taxes on goods and services levied by the central government and states by a single tax on value added. It will thus reduce tax cascading, facilitate a common national market, encourage voluntary tax compliance, reduce tax collection costs, support investment and improve competitiveness. All taxpayer services, such as registration, returns and payments will be available online, which would make compliance easy and transparent.

The GST reform is intended to be revenue neutral although it may affect the allocation of revenue across states and between states and the central government. However, the central government has committed to compensate states fully for any loss in revenue they suffer in the five years following the implementation of the GST.

Box 1.1. **The Goods and Service Tax (GST) bill** *(cont.)*

Designing the GST

The GST Council has been constituted, with a two-thirds vote share for the states. It is responsible for recommending tax rates, exemptions, threshold limits and special provisions for certain states and devising the mechanism for resolving disputes. A four-rate structure has been proposed: 6% on essential items; two standard rates at 12% and 18%; and a higher rate of 26% on luxury goods. A tax over and above 28% will be imposed on some luxury and demerit goods (including sodas, tobacco and luxury cars). There will be about 100 items exempted (mainly food). Petroleum products, alcohol, electricity and real estate are excluded. Firms with a turnover of less than INR 2 million (about USD 30 000) will be exempted except in the North-eastern states where a lower exemption limit of INR 1 million will apply. The complex rate structure creates the possibility of mis-declaration to benefit from lower rates or exemptions.

Next steps to implement the GST

The government's objective is to introduce the GST from July 2017 as the existing system of indirect taxation is due to lapse in September 2017. The IT infrastructure is being developed and tax officers will have to be trained. Consultations, workshops and training sessions for the industry, traders, staff and all other stakeholders involved have begun.

Table 1.1. **Tax revenue: level and mix**

as a % of GDP

	Brazil	China	India	Indonesia	Russia	South Africa	OECD
	2014	2013	2014	2014	2014	2014	2014
Taxes on income	6.9	4.9	5.6	5.2	6.7	14.3	11.5
Individuals	2.5	1.1	2.2	2.3	3.4	8.9	8.4
Corporations	3.1	3.8	3.4	2.9	2.9	4.8	2.8
Unallocated	1.3	0.0	0.0	0.0	0.4	0.5	0.3
Social security contributions	9.6	4.6	0.0	0.0	6.7	0.8	9.5
Taxes on property	1.9	1.5	0.8	0.2	1.1	1.4	1.9
Taxes on goods and services	13.9	13.5	10.3	5.4	13.7	11.4	11.0
Other taxes	1.0	0.2	0.1	1.4	0.0	0.0	0.2
Total tax revenue	**33.4**	**24.8**	**16.8**	**12.2**	**28.2**	**27.8**	**34.2**

Source: OECD Revenue Statistics database; IMF; and India's Ministry of Finance.

Reforming the personal income tax and property taxes should be given priority to meet financing needs and increase the redistributive impact of taxes. As in many emerging economies, the low level of income of a large share of the population and rampant informality are challenging. However, income and property taxes in India are lower than in several other emerging economies. The number of taxpayers is extremely low while capital and agricultural income is largely untaxed. Experience in some countries with large informal sectors, in particular China, Colombia and South Africa, suggests that there are options to increase the coverage of these taxes.

Taxing powers of states and local governments need to increase

Providing sub-national governments with greater tax autonomy would allow them to better meet local citizens' needs. It would also help better match their large autonomy in spending, increase accountability, provide an incentive to grow their tax base and support the move towards competitive and co-operative federalism (see Chapter 2). The allocation of taxing powers between the central government and the states is defined in the Constitution (Box 1.2). States' own taxes currently account for a relatively large share of total taxes (Figure 1.2.B). However, the implementation of the GST will reduce states' autonomy as most taxes on goods will be subsumed into the new GST. Municipalities' revenue raising powers are not clearly established.

Box 1.2. **The allocation of taxing powers across levels of government in India**

The Constitution currently allows the **central government** to levy taxes on the production of goods and the provision of services but not on the sale of goods at later stages, with the exception of inter-state sales – the implementation of the GST will change this. Only the central government is allowed to impose tariffs on international trade, including duties designed to ensure that imports are subject to the same central VAT as domestically produced goods. The central government also taxes personal income (non-agricultural), corporate income and services. It implements an excise duty on tobacco and non-alcoholic products.

State taxes:

- Tax on the sale of goods within their boundaries. The main tax on goods is the VAT introduced in 2005 to replace the sales taxes (services are not taxed at the state level).
- Tax on agricultural income and land revenue.
- Luxury tax, entertainment tax, excise duty on alcohol, tax on motor vehicles, tax on passengers and goods transported by motor vehicles, and electricity duty.
- Professional tax is imposed on anyone earning a salary or an income from a profession such as lawyer, doctor or accountant. It is levied by state governments or municipalities. The Constitution, however, fixes a ceiling of INR 2 500 per taxpayer per year (unchanged since 1988). The professional tax varies significantly across states. Some states have no professional tax (including Rajasthan) but most impose a progressive levy with a maximum amount of about INR 200 per month. Delhi implements relatively high and progressive rates but with a large tax allowance. At present, 21 states levy a professional tax. In states such as Kerala and Tamil Nadu, municipalities also levy this tax.

Municipalities

The Constitution authorises states to devolve the power to levy taxes, duties, fees and tolls, to local authorities. It does not embody a separate list of taxes for local bodies, however. The main local taxes are as follows:

- The recurrent tax on immovable property is mainly levied by local authorities, if states have devolved them some powers to set the base and rates and to enforce it.
- Some states, including Maharashtra, allow urban local bodies to levy a tax (Octroi) on the entry of goods into a local area for consumption, use or sale.
- Taxes on luxuries (entertainment, betting and gambling).

There is room to raise sub-national taxes. Property taxes, which are typically sub-national government taxes in most decentralised countries, are extremely low in India. Some states levy a professional tax on individuals, which applies to business owners, individuals working in private companies and merchants. Rates and thresholds vary across states but any amount paid is deducted from the central government's personal income tax. Overall revenue is limited, however, as the professional tax has been capped by central government at INR 2 500 per year, unchanged since 1988. States are also entitled to levy a tax on agricultural income and land revenue but seldom exercise this right. Overall, income taxes (i.e. professional tax and tax on agricultural income) account for less than 2% of states' own tax revenue, suggesting that there is scope to raise states' income taxes. One avenue is to raise the cap on the professional tax while eliminating deductibility from the central government income tax. This would both increase states' tax autonomy and improve states' accountability since any increase in state taxes would result in an increase in the taxpayer's total (state *plus* federal) tax liability.

The personal income tax could raise more revenue and redistribute more

Revenue from the personal income tax is low by international standards (Figure 1.3) and the redistributive impact is limited. This reflects: *i*) a very large zero rate tax bracket that effectively excludes many taxpayers, *ii*) low rates which kick in at very high income levels, *iii*) generous specific tax concessions, which benefit the rich more than the poor, *iv*) low capital income taxation at the individual level and *v*) pervasive tax avoidance and evasion.

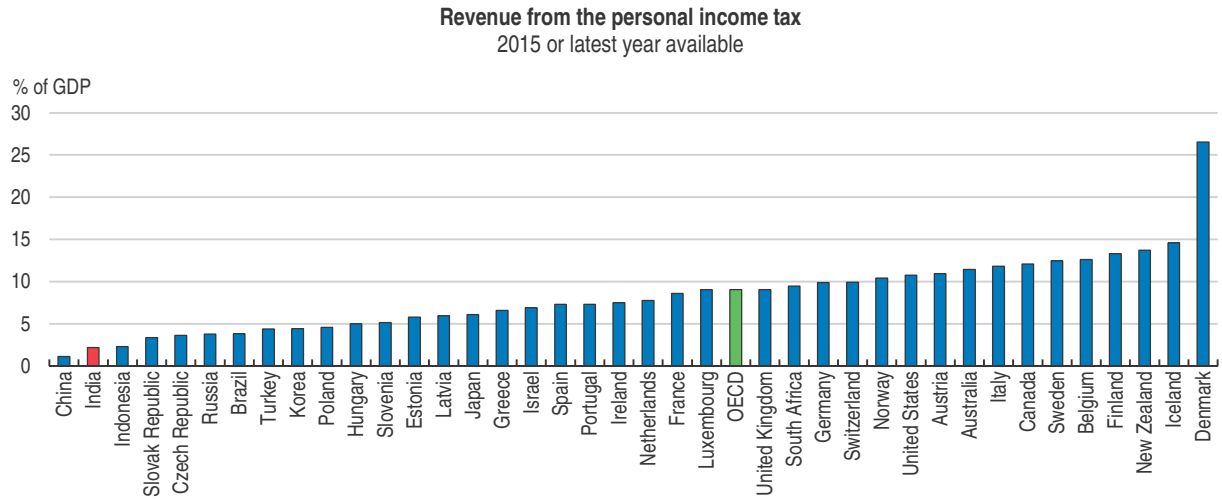
Too few taxpayers

Only 5.6% of the population pay personal income tax – a very low share by international standards and a limit to the effective functioning of a democracy according to the government (Government of India, 2016a). As in many emerging economies, the large degree of labour market informality is a key challenge for personal income taxation. The bulk of those paying income taxes are salaried employees whose companies are responsible for making their tax payments. However, the zero-rate tax bracket is very wide. An individual did not pay any income tax until income was around two times above per capita GDP and two and a half times the average wage in the organised industrial sector in FY 2015/16 – a threshold much higher than other emerging economies (Figure 1.4.A). Thus, most employees are not liable to pay personal income tax, even those working in the formal/organised sector. A recent study estimated that if the exemption threshold had remained unchanged from its FY 2004/05 level, the number of people filing a return would be four times higher (NIPFP, 2015).

Self- and family-entrepreneurs, professionals (e.g. doctors and lawyers) and small traders, who largely operate in cash, can hide much of their income. Under-reporting is also believed to be common among the rich, with a negative impact on tax morale and compliance by lower income taxpayers. Only 2 904 taxpayers reported annual income above INR 50 million (about USD 0.7 million) in FY 2012/13, which seems low compared with other indicators of income and wealth – 13 200 Indians had net wealth above USD 10 million according to Credit Suisse (2015).

Agricultural income is untaxed, while agriculture accounts for about 50% of total employment and 18% of India's value added. Most farmers are small and earn very little income. However, some are wealthy and could pay income tax. Not taxing agricultural income creates an incentive to keep resources in a sector with low productivity or to

Figure 1.3. **The personal income tax raises little revenue**



Note: Social security contributions are not included.
Source: OECD Revenue Statistics database; Chinese Ministry of Finance; Indian Ministry of Finance; Rosstat; and South African Ministry of Finance.

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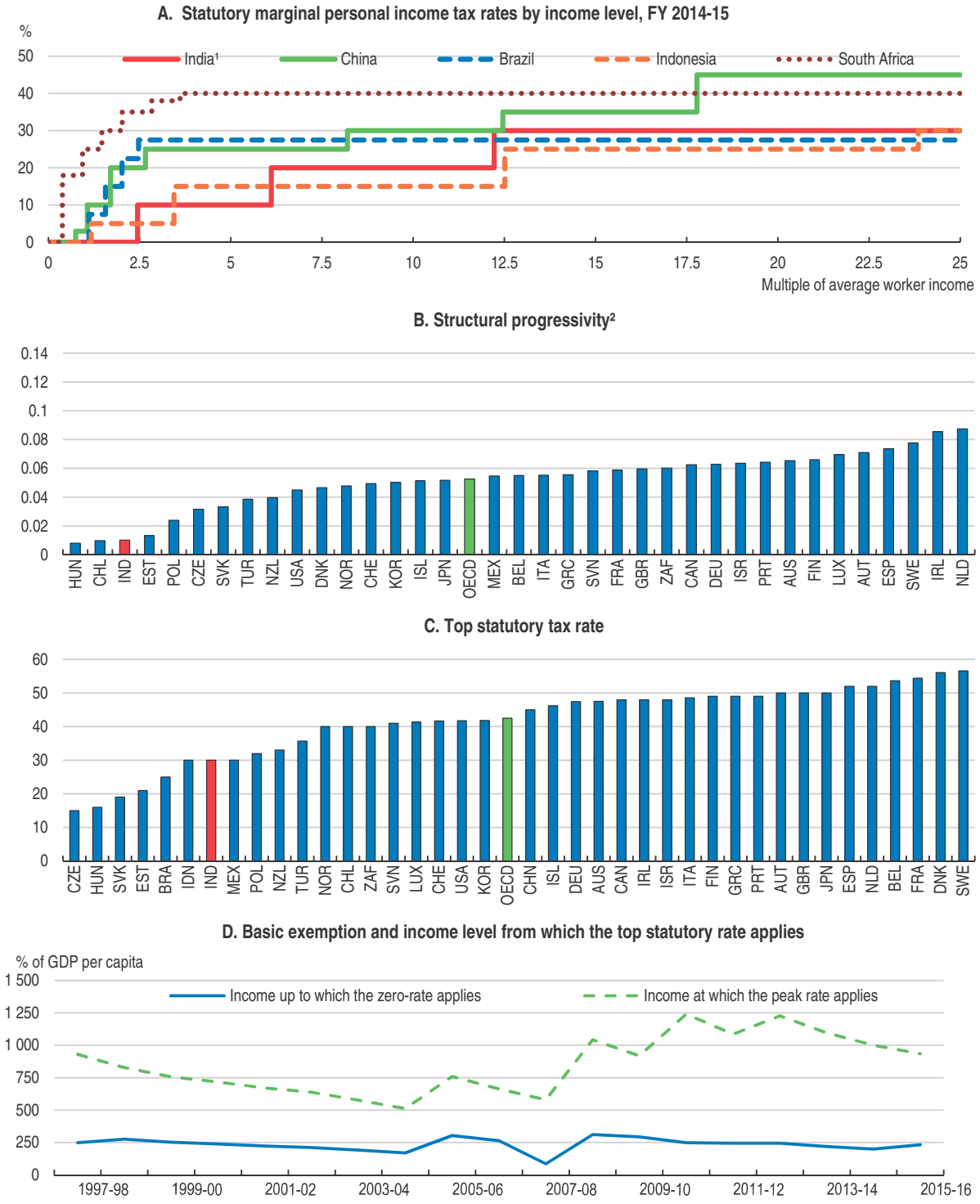
declare non-agricultural income as agricultural income. The political economy of removing this exemption would likely be challenging. In addition, the Constitution currently provides the right to tax agriculture solely to the states, and not to the central government. A communication campaign would, however, help, emphasising that most agricultural workers would not be affected as they would remain in the (generous) zero rate tax bracket.

There is a clear need to increase the number of taxpayers, as recognised by the government. The objective announced in June 2016 is to double the number of taxpayers to 100 million. Recent efforts to reduce the size of the black economy (in particular the replacement of large notes in November 2016 and the cut in threshold limits for reporting financial transactions under the income tax rules) will be instrumental to improve tax compliance. Experience in other emerging economies reveals that adjusting tax parameters would also help reach the government objective. South Africa has simplified the tax structure and broadened the tax base; the number of registered taxpayers increased from 11% to 30% of the population between 2010 and 2014 (OECD, 2015a). China also succeeded in increasing the number of taxpayers from less than 0.1% in 1986 to about 15-20% in the 2000s by under-indexing the basic exemption (Piketty and Qian, 2009).

The personal income tax embodies little progressivity

The personal income tax is not very progressive. The top rate (30%) is relatively low (Figure 1.4.C) although the top effective marginal rate increases with the 12% surcharge on the amount of tax payable on total income exceeding INR 10 million (USD 0.2 million). This surcharge was introduced in FY 2015/16 when the wealth tax was abolished. An additional 2% education cess (i.e. earmarked tax) is levied on the income tax liability. However, the income level at which the top rate kicks in has been increased over time and now stands at 10 times the average wage in the organised sector (Figure 1.4.D). The average income of those who pay the top (30%) marginal rate corresponds to the 99.5th percentile (Government of India, 2016a). As a result, the overall OECD structural progressivity index,

Figure 1.4. **The personal income tax has little redistributive impact**



1. The average worker income is for the organised manufacturing sector as reported in the Annual Survey of Industries.
2. The structural progressivity indicator for personal income tax measures the percentage point increase of the average tax rate per percentage point increase of the average wage over the 50%-500% of the average wage income interval. That is the increase in the average tax rate inducted by an increase of the average wage by one percentage point. As such, it does not take account of India's top personal income tax rate which kicks in at around 1200% of the average wage. Calculations for India and South Africa are for 2015. Data for OECD countries are for 2012. The OECD average is unweighted.

Source: Ministry of Finance; Central Statistics Office; Annual Survey of Industries; OECD calculations; and OECD Taxing Wages 2015.

StatLink http://dx.doi.org/10.1787/888933453565

calculated as the ratio of the change in the average PIT rate relative to a given increase in income, indicates that the statutory system embodies much less progressivity than most OECD and other emerging economies – the contrast with South Africa is particularly strong (Figure 1.4.B).

A host of specific tax expenditures further reduces the tax liabilities of the well-off. Repayment of mortgage principal and interests, as well as interest on loans for higher education, are deductible from taxable income without limit. Other tax allowances are capped, including: pension contributions or life insurance payments up to INR 150 000 per year (about USD 2 250), medical insurance premiums up to INR 15 000 and medical expenses not covered by insurance up to INR 40 000. A government estimate suggests that overall tax expenditures that reduce personal income tax payments amounted to INR 535 billion in FY 2014/15, i.e. 20% of actual personal income tax revenue. Streamlining tax expenditure would allow raising more revenue, reduce distortions in resource allocation, and make the tax system fairer and simpler. For those tax expenditures that cannot be eliminated, replacing tax allowances by nominal tax credits, as has occurred in South Africa for contributions to medical funds, would help to increase the actual progressivity of the personal income tax. Another approach, implemented in Colombia in 2012, is to cap tax expenditures for rich households to ensure that they pay some minimum income tax.

The taxation of capital income at the personal level is low, if not nil, and flat in most cases, with the implicit tax subsidy benefitting the rich most. Capital gains are taxed upon realisation at 20%. If the underlying asset is held for at least three years (one year for listed shares), gains may be exempt if reinvested in certain securities or sectors. Bonds issued by designated public enterprises are tax-free. Pension savings (Employees', Voluntary and Personal Provident Funds) are exempted from taxes at all three stages, i.e. at the time of initial saving, during the period when the funds are invested, and when the investment is liquidated and a pension is paid out. While the 2016/17 Budget envisaged taxing some (60%) of the interest earned, fierce opposition from trade unions led the government to maintain the generous tax treatment of pension savings.

Distributed dividends are tax exempt in the hands of personal shareholders. However, a dividend distribution tax (DDT) of 15% is withheld by corporations on distribution, with no relief granted for corporate income tax already paid. In 2016, an INR 1 million cap was introduced on the total amount of dividends exempted per year at the personal level. When taking account of both the tax paid at the corporate level and the DDT, the effective statutory tax rate on dividends is relatively high. Such a system has pros and cons. A dividend tax withheld at the corporate level is easier to administer – there are less corporations distributing dividends than personal shareholders receiving dividends – and more difficult to evade. However, such an approach does not allow dividends to be taxed at progressive income tax rates.

Bringing India's PIT thresholds more into line with other emerging economies and abolishing tax expenditure would increase PIT revenue significantly. Based on conservative assumptions, revenue would increase by about 50% (Box 1.3). The revenue impact of lowering the threshold from which the top income rate is particularly high.

Box 1.3. **Options for raising more personal income tax revenue**

To gauge the potential revenue impact of bringing the Indian personal income tax schedule more in line with other emerging economies, simulations have been run, using the income tax return statistics recently released by the Ministry of Finance. Information on the number of individual taxpayers is available by income classes. Based on statutory rates and thresholds (including for the basic allowance), one can estimate how much tax should be paid by the average taxpayer in each income class. Simulations are carried out by changing the thresholds above which statutory rates apply.

Assuming that changes in income thresholds do not alter individuals' behaviour, the full set of underlying reforms would increase PIT revenue by about 50% (Table 1.2). Although this assumption may be too optimistic, the impact of implicit PIT reforms is likely vastly underestimated since:

1. The simulation does not include the taxation of agricultural income as any other income nor the potential reduction in income under-declaration since the lack of data makes the calibration difficult.
2. The revenue impact of lowering the threshold at which the PIT top rate kicks in is difficult to assess in the absence of additional information on the distribution of income. If one uses a Pareto interpolation of the income distribution for top incomes, as suggested by Piketty (2001), instead of the "average taxpayer" for this class, the estimated impact would be more than double the amount shown here.
3. Dismantling the Hindu Undivided Family (HUF) system (see below) would yield additional revenue which is, however, difficult to assess in the absence of data on who possesses HUFs' assets and income.
4. The simulation adds up the impact of reforms while the implicit value of abolishing PIT concessions will likely be higher if the PIT rate schedule is reformed.

Table 1.2. **Reform options for raising more personal income tax revenue: 4 scenarios**

Measures	Increase in revenue compared with actual PIT revenue (for both individuals and HUFs)
Personal income tax on individuals	
1. Reduce the income threshold at which the PIT top rate kicks in to 500% of the average wage[1, 2]	18.2%
2. Reduce the income threshold at which the zero tax band applies to 100% of the average wage[1, 2]	3.3%
3. Reduce the income threshold at which the 20% rate kicks in to 300% of the average wage[2]	7.8%
Income tax concessions	
4. Scrap all personal income tax concessions	19.6%
Implementing all measures	48.9%

1. Under this scenario, the 20% tax rate does not apply since it kicks in at 5.6 times the average worker income under the existing tax schedule, i.e. above the proposed 500% threshold for the top rate.
2. The reference average wage is for employees in the manufacturing organised sector.

Source: OECD calculations based on data from the Income Tax Department - Income Tax Return Statistics Assessment Year 2014-15.

The Hindu Undivided Family (HUF) system (Box 1.4) offers those with substantial property income an avenue to reduce their tax liabilities. An individual can file two income tax returns, one in his individual capacity and a second in the name of his HUF. Overall, 940 000 HUFs filed an income tax return in FY 2014/15. When an individual files two income tax returns (one for his own income, the other one for the HUF), the level of tax-free income doubles to INR 500 000 (USD 7 800). Additional tax expenditures and deductions can be claimed. Overall, the family's income tax liability declines significantly. If a parent bequeaths property to an adult child as chief (Karta) of a new HUF, the child can treat this property as separate from his own property so that the income generated from the property in the new HUF will be taxed at the new HUF entity rather than to the parent or the child. Overall, the HUF results in lower tax revenues, reduces tax liabilities of the most well-off, creates horizontal inequity across individuals with different family status, and complicates the assessment and collection of income tax (Sanyal, 1995). It also leaves gifts and inheritances basically untaxed.

The decision of some states, including Kerala, not to recognise HUFs should be considered in other states or at the central government level. It would not only allow a fairer taxation of capital income but enable the introduction of inheritance and gift taxes which are considered as most appropriate to reduce income inequality while promoting economic growth. It would also promote equal opportunity and inter-generational mobility (OECD, 2012; Joumard et al., 2012; Piketty and Saez, 2013; OECD, 2015f).

Box 1.4. **The Hindu Undivided Family**

The Hindu Undivided Family (HUF) is a separate legal entity under the Income Tax Act. The HUF is eligible for the basic (very generous) tax exemption as well as the specific exemptions (e.g. for medical expenses) and rebates (e.g. on capital gains), just like an individual.

Any individual who is born Hindu, Sikh, Jain or Buddhist, can form a HUF, provided he is married. The HUF consists of an ancestor (the karta) and all that common ancestor's lineal descendants together with their spouses and unmarried children. Traditionally, the karta is the oldest male family member. When the karta dies, his eldest son becomes the next karta. All the male members (sons, grandsons and great-grandsons of the karta), *plus* unmarried daughters (only since 2005), are called coparceners, but not granddaughters and great-granddaughters. A coparcener has the right to demand that the family property gets divided, so that they can receive their share in the property, or in whatever assets the HUF holds.

Joint family (both immovable and movable) property which funds the HUF includes: i) ancestral property (i.e. a property received by a Hindu male from his father, paternal grandfather or paternal great grandfather); ii) property that is acquired with HUF assets; iii) property from a partition of a larger HUF; and iv) separate property and gifts that are contributed by a member (under certain limits and conditions). A HUF can also build its capital by borrowing from non-members and the income so earned will only be HUF income. All income arising out of a HUF's property is income of the HUF and will be assessed as its income. A HUF cannot earn labour income, however, as wages are considered a result of personal skills and services.

Social security contributions penalise job creation in the formal sector

Social security contributions create incentives for firms to stay small or rely on temporary workers (so-called contract workers). Establishments with less than 20 employees do not have to contribute. Employees working in establishments with 20 persons or more have to contribute 12% of their gross salary to a pension system (the Employee Provident Fund). However, contributing becomes voluntary for those earning more than INR 15 000 per month (i.e. about USD 220). Employees also have to contribute 1.75% of their gross salary for the health insurance – to the Employees State Insurance Corporation – but with a cap at a monthly gross salary of INR 15 000 per month. In addition, employers have to contribute to the pension and health insurance, with similar caps. Such an approach increases the cost of labour of un-qualified labour, thus weighing on job creation in the organised sector and creating incentives for enterprise to rely on informal labour (e.g. contract labour), to stay small, or to evade tax. In practice, the share of employment in firms with more than 20 employees is extremely small by international standards (OECD, 2014).

Social security contribution caps also result in regressive taxation: the marginal tax wedge for an employee earning 67% of the average earning (in a company with more than 20 employees) is higher than for one earning the average wage (Table 1.3). It is also higher than in Indonesia and South Africa.

To eliminate the adverse impact of social security contributions on quality job creation while offering social benefits to low-income earners, the government should consider two options. The first option would consist of making social security contributions mandatory for all workers, i.e. even for those earning more than the current cap (INR 15 000 per month) and for companies with less than 20 employees. Such an approach would reduce the bias against low-qualified jobs. It runs, however, the risk of increasing the use of informal labour and fostering the substitution of capital for labour. The second option would consist of eliminating wage-based social security contributions and financing social benefits through higher general government revenue – this chapter argues that there is scope to raise more revenue from the personal income tax and property taxes. Given the existing fiscal constraints, however, a move towards universal social benefits could only be gradual, with decisions on the level and coverage of social benefits taking into account existing fiscal constraints, the large number of the poor, as well as the other social programmes targeted at the poor.

Table 1.3. **The average tax wedge decreases along the income ladder in India**

Income tax *plus* employee and employer contributions *less* cash benefits (% of labour costs, 2013)

Family-type	Single no children			Single 2 children	Married 2 children			Married no children
Wage level (% of AW):	67	100	167	67	100-0	100-33[1]	100-67[1]	100-33[1]
Brazil	33.5	33.5	36.3	33.5	33.5	31.4	33.5	33.3
China	34.1	33.7	35.3	34.1	33.7	35.9	33.9	35.9
India unorganised sector	0	0	0	0	0	0	0	0
India organised sector[2]	26.1	6.2	6.2	26.1	6.2	11.6	14.7	11.6
Indonesia	8.2	8.2	9.4	8.2	10.7	8.2	8.2	8.2
South Africa	10.6	14.3	19.5	10.6	14.3	11.5	12.8	11.5
OECD average	32.3	35.9	40.3	17.7	26.6	28.3	31.2	32.9

1. Two-earners family.
2. Results apply to employees working in a firm with more than 20 employees. Calculations have been made with the previous INR 6 500 threshold for mandatory social security contributions, later raised to INR 15 000.

Source: OECD Taxing Wages, 2015, Special feature: "Modelling the Tax Burden on Labour Income in Brazil, China, India, Indonesia and South Africa".

Property taxes could help finance better municipal services

There is scope to raise more revenue from property taxes in India. The wealth tax (1.1% of central government's total tax revenue in FY 2013/14) was abolished in 2015, while inheritance taxes are virtually absent despite the extreme concentration of wealth in the hands of a few. A recent survey (Credit Suisse, 2015) suggested that the poorest 30% households own 0.1% of total wealth in India while the top 10% owned 62%. This survey also revealed that non-financial assets (i.e. mainly land and agricultural assets) account for the bulk of household wealth – 86%, compared with around 50% in most other regions of the world. Logically, real estate is the main property tax base in India and both transaction taxes and recurrent taxes on immovable property exist.

Relatively high stamp duties and registration charges are levied by Indian states on the sale of immovable property. Related state revenues stand at about 0.8% of GDP despite the fact that market values are often vastly understated. Such transaction taxes discourage people and companies from buying and selling property, impeding the reallocation of property to their most effective use. Given current fiscal needs, it should be retained but phased out in the medium run and replaced by the greater use of recurrent taxes on immovable property based on updated property values.

Revenue from recurrent taxes on immovable property stands at about 0.2% of GDP, i.e. well below the level in OECD and other BRIICS countries (Rao, 2013). Recurrent taxes on immovable property are levied in most states at the local level, a welcome feature given their many advantages as local taxes (Box 1.5). However, local governments have very limited autonomy to set the bases and rates and to enforce them since they often lack appropriate workforce. States can decide to abolish them and some did so (Rao, 2013), creating uncertainty on local governments' revenue source. Raising more revenue from recurrent taxes on immovable property would help municipalities to fill the vast municipal infrastructure gaps (see Chapter 2). To achieve this, India needs to give municipalities more certainty and powers over the bases and rates of recurrent taxes on immovable property.

Raising more revenue from recurrent taxes on immovable property would require building up-to-date property values and supporting local governments' ability to manage the register. The out-dated and partial assessment of property values is a key issue in India, as in many other countries. It affects the revenue of recurrent taxes on immovable property and creates horizontal inequities. The coverage rate is low, with wide-ranging exemptions. Assessed values are as low as 8-10% of their market value. Some municipalities have taken the lead in moving away from the "fair" rental value (i.e. the rent which a similar property with similar features in the same area would fetch), which has historically been used but is difficult to implement. Patna has implemented a presumptive area-based valuation, taking into account the location, usage and type of construction (Rao, 2013). Others (e.g. Bangalore) have introduced a self-assessment system, which was also implemented with success in large Colombian cities (Barranquilla and Bogota), and promoted online payment. The sharing of experience across municipalities would help to implement the best solution given local constraints.

Box 1.5. **Taxing immovable property - lessons from the literature and from other countries**

Reliance on immovable property taxation as a source of revenue for local governments has many merits compared with other taxes (OECD, 2015e; Blöchliger, 2015). *First*, recurrent taxes on immovable property are closely linked to the benefits taxpayers receive from local public services. By helping fund these services, they reduce local governments' dependence on intergovernmental transfers. *Second*, it is considered to be one of the least harmful taxes to economic growth. *Third*, taxes on immovable property are difficult to evade as the base is immobile, allowing local authorities to vary the rates without losing the base. *Fourth*, they can be designed to have desirable redistributive properties. Because real estate taxes tend to be regressive, some OECD countries have granted relief to low-income households so as to introduce some progressivity (Joumard et al., 2012). To allow for the uncertainty around the true value of a property, a lump-sum might be deductible from assessed property values. Some emerging economies raise revenue from real estate taxes while preserving progressivity. As an illustration, in Johannesburg (South Africa), residential property's estimated market values are taxed only above a given threshold, and there are rebates for individuals receiving pensions, living below the city's poverty index or temporarily without income (OECD, 2015a).

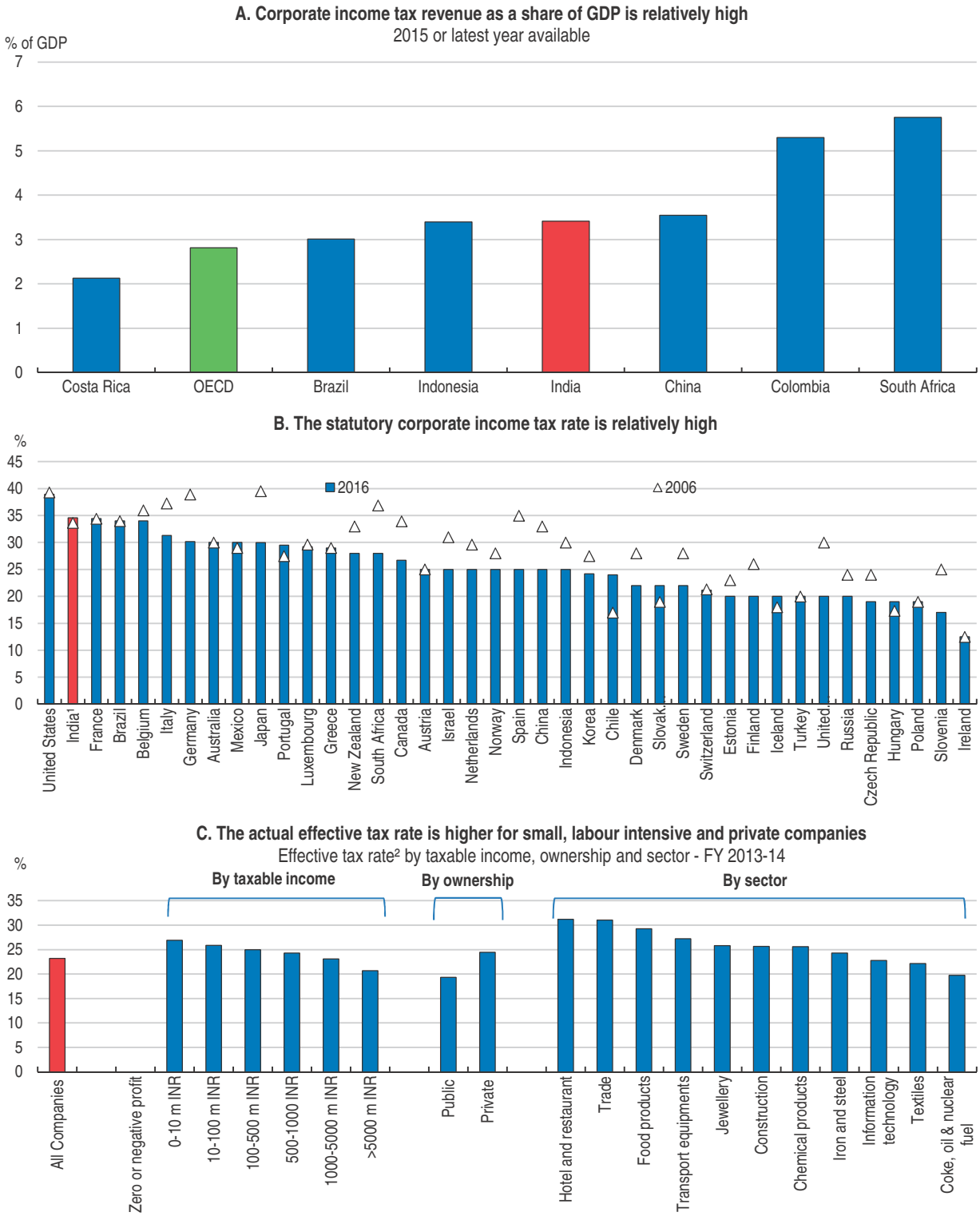
Although recurrent taxes on immovable property are unloved by voters and taxpayers, several OECD countries adopted and implemented property tax reforms after the financial, economic and fiscal crisis, thereby increasing both revenues and fiscal autonomy of sub-national governments. Recurrent taxes on immovable property today make up around 1% of GDP in OECD countries. More than 95% of the revenue accrues to sub-national governments (OECD, 2015b), making it the most important tax revenue for state and local governments in many OECD countries.

Company taxation: cutting rates and broadening the base to boost firm growth and job creation

Creating a business-friendly tax environment is key to promoting investment and job creation and to raising India's competitiveness. The latest Enterprise Survey (World Bank, 2014) revealed that among the list of 15 potential business environment obstacles, the level of tax rates comes third after corruption and lack of electricity. The corporate income tax (CIT) is a key revenue source for India - 20.6% of total tax revenue and 4% of GDP (Figure 1.5.A), even more than in most emerging economies. As corporate taxes tend to be particularly harmful to growth (Johansson et al., 2008), the priority should not be to raise more CIT revenue but to reduce distortions arising from the CIT.

The 2010 Direct Tax Code (DTC) Bill proposed a simpler tax code, by removing most tax concessions while lowering rates. It aimed at boosting growth by improving the allocation of resources, reducing tax uncertainty and the discretionary power of the tax administration, and lowering the bias against small companies which cannot afford in-house tax experts. Although the Bill lapsed in Parliament, measures have recently been taken to reduce rates while broadening the base and to improve the ease of paying taxes for firms. Some aspects of the tax legislation have also been clarified to provide more certainty for domestic and foreign firms, while measures to curb tax evasion are being implemented. However, more needs to be done.

Figure 1.5. **Corporate income tax: high statutory rate and many distortions**



1. The CIT rate stands at 30%. A 12% surcharge on total tax liabilities applies if taxable income exceeds INR 100 million (7% if it stands between INR 10 and 100 million), as well as a 3% cess. Overall, the statutory rate is 34.6%.
2. Tax to profit ratio.

Source: Central Statistics Office of India; OECD Revenue Statistics database; South African Revenue Service; OECD Tax database; Deloitte; Ministry of Finance of India.

StatLink http://dx.doi.org/10.1787/888933453574

A high corporate income tax rate with a narrow tax base

The statutory corporate income tax rate is high compared with other BRIICS and OECD countries (Figure 1.5.B). For resident companies, the statutory CIT rate stands at 30%, with a lower rate of 29% for small companies (i.e. turnover less than INR 50 million) and 25% for new manufacturing companies that do not claim any tax concessions. A 12% surcharge on the total tax liability applies if taxable income exceeds INR 100 million (about USD 1.6 million) and a 7% surcharge if taxable income stands between INR 10 million (approx. USD 156 000) and INR 100 million. In addition, a 2% education "cess" (earmarked tax) and a 1% secondary and higher education "cess" are payable on the total tax liability (including surcharge, if applicable). Overall, the statutory rate stands at 34.6% if taxable income exceeds INR 100 million.

There is a sizeable gap between statutory and effective tax rates, reflecting various special tax rates, exemptions, deductions, rebates, deferrals and credits. A *Statement of revenue foregone* with estimates of tax expenditure by key categories is presented annually to Parliament since the mid-2000s in the context of budget discussions, contributing to fiscal accountability and transparency. Tax concessions for companies (in gross terms) are estimated to amount to 0.8% of GDP. Accelerated depreciation, area-based exemptions and tax relief for infrastructure/network industries account for the bulk of the foregone revenue (Table 1.4). The tax system has also been used to promote specific industries. As an example, the health care industry benefits from relatively high depreciation for medical equipment, income tax exemptions for five years for rural hospitals, customs duty exemptions for imported equipment that are lifesaving and an income tax exemption for health insurance (Government of India, 2015). To ensure that profitable companies pay at least some tax, India operates a minimum alternate tax (MAT) which reduces the total revenue foregone estimate from 22% to 14% of corporate income tax revenue.

Table 1.4. **Major incentives granted to companies under the central government income tax**

(FY 2014-15)

	INR billion	% of CIT revenue	% of GDP
Accelerated depreciation	370	8.2%	0.3%
Area-based exemptions	281	6.2%	0.2%
Backward areas	77		
Special economic zones	204		
Infrastructure	227	5.0%	0.2%
Telecom	15		
Power	107		
Oil and natural gas	67		
Scientific research	82	1.8%	0.1%
Total gross corporate income tax concessions[1]	**984**	**21.8%**	**0.8%**
Recovered through Minimum Alternate Tax[2]	360	8.0%	0.3%
Net revenue foregone[1]	**624**	**13.8%**	**0.5%**

1. The total gross corporate income tax concessions and net revenue forgone include other smaller concessions not shown above.
2. India operates a minimum alternate tax (MAT) to ensure that profitable companies pay at least some tax. If a company's tax liability is below 18.5 % of its book profits, the book profits are deemed to be taxable income and are subject to the MAT at a rate of 18.5%, plus surcharges.

Source: Statement of revenue impact of tax incentives under the central tax system: financial year 2013-14 and 2014-15; Public Finance Statistics.

Tax concessions introduce economic distortions across firms of different size. The effective tax rate on companies stood at 23.2% in FY 2013/14. Despite the lower surcharge rates imposed on companies with taxable income below INR 10 million, the effective tax rate is higher for small companies (Figure 1.5.C). This suggests that large companies -- that can more easily afford specialist tax advice – are better able to exploit tax concessions.

The government has committed to a "base broadening - rate reducing" reform whereby the corporate income tax rate will be lowered to 25% over a five-year period and most tax concessions will be eliminated. The 2016/17 Budget began this process with a rate reduction from 30% to 29% (*plus* surcharges) for companies with taxable income below INR 50 million, and to 25% for new manufacturing companies that do not claim any tax concessions. While this first step has lowered the effective rates bias against small companies, these targeted reductions are in conflict with the neutral approach of the overall "base broadening – rate reducing" reform. In order to reduce complexity, it is important that such targeted reductions remain temporary and that the move to a single 25% corporate tax rate for all companies, together with the elimination of most concessions, is fully implemented at the end of the five year period, if not sooner.

Generous depreciation allowances have created a bias against labour-intensive activities

Labour-intensive sectors (e.g. hotels and restaurants; retail and wholesale trade) face relatively high effective rates, as they benefit less from the rather generous depreciation allowances. Tax depreciation rates often stand above rates of true economic depreciation for a wide range of assets (Table 1.5) and tend to be generous by international standards (Oxford University Centre for Business Taxation database). Accelerated depreciation provisions further vary across asset types. As an illustration, spending on commercial vehicles receives a better treatment than R&D for electronic products and pre-packaged software (Thomas et al., forthcoming). The 40% cap on depreciation rates (except for R&D which has a 150% rate) to be introduced in April 2017 will reduce some biases. Ideally, tax depreciation should be set to approximate true economic depreciation rates. And more should be done to eliminate the biases against labour-intensive activities which run counter to the objective of promoting job creation.

Table 1.5. **Tax depreciation rates and true economic depreciation rates for selected assets in India**

Rates	Tax depreciation	Economic depreciation
Non-residential buildings	0.10	0.03
Commercial vehicles	0.50	0.22
Computers (servers and networks)	0.60	0.27
Computers (end-user devices)	0.60	0.73
Plant and machinery (general)	0.15	0.11
Electrical equipment	0.80	0.17
Plant and machinery (pharmaceuticals)	0.15	0.09
Plant and machinery (telecommunications)	0.15	0.13
Pre-packaged software	0.25	0.55
Custom software	0.25	0.33
R&D for motor vehicle manufacturing	0.25	0.31
R&D for electronic product manufacturing	0.25	0.40

Note: Estimates of true economic depreciation rates have been constructed by converting estimated useful lives provided in India's Companies Act 2013 to declining balance depreciation rates based on Fraumeni (1997) and US Department of Commerce (2003) and Li (2012).
Source: Thomas et al., forthcoming.

Area-based tax relief (backward areas and Special Economic Zones): mixed results

Generous tax incentives are granted for companies operating in Special Economic Zones (Box 1.6). Units operating in a special economic zone (SEZ) are fully exempt from corporate income tax for five years and receive a 50% exemption for the next five years. A further 50% exemption is provided for another five years to profits that are derived from exports if re-invested. Similar tax concessions apply to developers of SEZs. Recent empirical analysis, however, suggests that these tax concessions have had no clear impact on aggregate investment and exports (Rao et al., 2016). Total employment in SEZs, 1.2 million persons, is low despite the high level of investment. There is also evidence that SEZs have been misused by companies. For example, audits have identified cases where companies located in SEZs have claimed to have manufactured a product in the SEZ for export, when they have actually imported it and then immediately exported through the SEZ, to fraudulently claim the export profit tax concession.

Several measures have been taken to reduce tax concessions granted to SEZs but more should be done. Since 2012, units operating in a SEZ are subject to the Minimum Alternate Tax and the dividend distribution tax. The 2016/17 Budget introduced a sunset clause: tax benefits for SEZs will apply only to those units that begin production before April 2020. This is a welcome initiative but still implies tax relief for companies starting operation in 2020 up to 2030. An earlier sunset should be considered.

Generous tax relief is granted for companies operating in backward states so as to increase investment, employment and output in these regions. Companies operating in these states pay no corporate income tax for the initial five years and a reduced rate for the next five years. Initially designed for North Eastern states, this tax relief was later extended

Box 1.6. **Special Economic Zones in India**

India was one of the first in Asia to recognise the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla (Gujarat) in 1965. The Special Economic Zones (SEZs) Policy was announced in 2000, supported by quality infrastructure, an attractive tax package, both at the central government and the state level, with the minimum possible regulations. The main objectives of the SEZ Act passed in 2005 are:

1. Generation of additional economic activity;
2. Promotion of exports of goods and services;
3. Promotion of investment from domestic and foreign sources;
4. Creation of employment opportunities;
5. Development of infrastructure facilities.

Tax incentives in SEZs include: duty free import; 100% income tax exemption on export income for SEZ units for first 5 years, 50% for next 5 years thereafter and 50% of the ploughed back export profit for next 5 years; exemption from Central Sales Tax; exemption from Service Tax; and exemption from State sales tax and other levies as extended by the respective State Governments.

SEZs employ about 1.2 million people and exports from SEZs accounted for about one fourth of total India's merchandise exports in FY 2013/14.

Source: Government of India, *www.sezindia.nic.in/*.

to Jammu and Kashmir in 2002, to Himachal Pradesh and Uttarakhand in 2003. Concessions are granted to a backward state for a 10 year period, and a company commencing operation within this 10-year window benefits from the tax concession for the subsequent 10 years. In addition, an investment and a depreciation allowance were granted to Andhra Pradesh and Bihar in 2016. Rao et al. (2016) found evidence that tax concessions for backward states have raised investment, value added and employment in some backward states, but not in all. This suggests that the overall business environment, and in particular labour and product market regulations as well as infrastructure and human capital, play an important role in raising productivity in the states (see Chapter 2). To improve the effectiveness of tax concessions for operating in backward states by the central government, their renewal should be made conditional on states' action to improve the overall business environment.

Tax concessions for infrastructure and scientific research: only a second best?

Tax concessions for developing and operating key infrastructure account for about one fourth of total corporate income tax revenue foregone. They apply to the generation, transmission and distribution of electricity, for telecommunication infrastructure, roads, bridges or rail systems, highway projects, oil and natural gas, as well as some housing projects. In a number of cases, these concessions allow to prop up business profits as prices are set below market prices (e.g. electricity). These concessions have been particularly open to dispute and abuse because of complex eligibility criteria. As an example, size limits on apartments in housing projects have reportedly been bypassed with family members purchasing adjacent apartments to form a large one. Given India's need for better infrastructure and the fragile financial situation of many infrastructure companies, these concessions cannot be scrapped in the short run. However, their impact should be assessed regularly; sunset clauses should apply and eligibility criteria should be simple and defined so as to avoid too large a distortion. Improving infrastructure in the longer run would require implementing a price setting process which allows investors, providers and distributors to make "normal" profits, instead of a loss as it is currently the case for many of them.

Tax concessions for research and development (R&D) have been made less generous. The 2016/17 Budget reduced the rate at which companies are allowed to deduct their in-house spending from 200 to 100%. Many OECD countries have R&D tax incentives aimed at increasing private R&D expenditure towards a socially optimal level that takes account of positive knowledge spill-overs. In India, spending on R&D is lower than in OECD countries and China but is higher than in Indonesia and South Africa.

Experience in OECD countries suggest that tax incentives can be effective at raising R&D but the design of such schemes warrant attention in order to minimise the cost to taxpayers and the tendency of such policies to favour less dynamic incumbents at the expense of dynamic young firms (Andrews and Criscuolo, 2013). As in OECD countries, there has also been much debate in India about the effectiveness of tax incentives in raising R&D spending (Mani, 2010). Rao et al. (2016) point to some evidence of an economy-wide relationship between the increase in R&D expenses and patents but note that there is little evidence suggesting that companies investing in R&D saw their performance improving. In addition, R&D concessions are prone to abuse, in particular because what constitutes R&D expenditure is not obvious and requires significant resources to police. India should thus regularly assess whether existing R&D tax concessions are well-designed and are the best instrument to boost R&D spending.

The taxation of SMEs: reducing disincentives to grow and to incorporate

Small and medium-sized enterprises (SMEs) account for the bulk of Indian enterprises and bringing more of them into the tax net would have many benefits. It would raise more tax revenue, promote a level playing field and a culture of compliance. It would also improve SMEs' performance by enabling better access to finance and technology and by reducing exposure to harassment from tax inspectors and corruption.

The different regimes for taxing SMEs create distortions against incorporated firms, as well as disincentives to grow. Incorporated SMEs are subject to a combined statutory tax rate ranging between 33.1% (when the firm does not distribute dividends and face a 7% surcharge) and 43.6% (when all profits are distributed). Income from unincorporated SMEs is taxed under the personal income tax at a maximum marginal tax rate of 35.1% (i.e. 30% top rate, plus the 15% surcharge for top incomes and the 2% education cess), creating a bias against incorporation or growth up to a rather high income threshold. Higher compliance costs typically associated with incorporation add another disincentive to incorporation.

India also applies two presumptive tax regimes for specific unincorporated SMEs. The first one applies to firms in the transport sector owning less than 10 goods carriages. The second presumptive regime applies to firms outside the transport sector with an annual turnover of less than INR 20 million (about USD 312 000). For these firms, the taxable income is set at 8% of their turnover and personal income tax rates apply. Compared to the various other countries using presumptive taxes based on turnover, the threshold for the presumptive tax is high and the 8% share of turnover treated as taxable is low (Thomas et al., forthcoming). For those firms operating in sectors where the typical profit margin is above 8%, the system also creates a strong disincentive to increase their (declared) turnover beyond INR 20 million because of the steep increase in tax liability associated with the move to the general corporate income tax system.

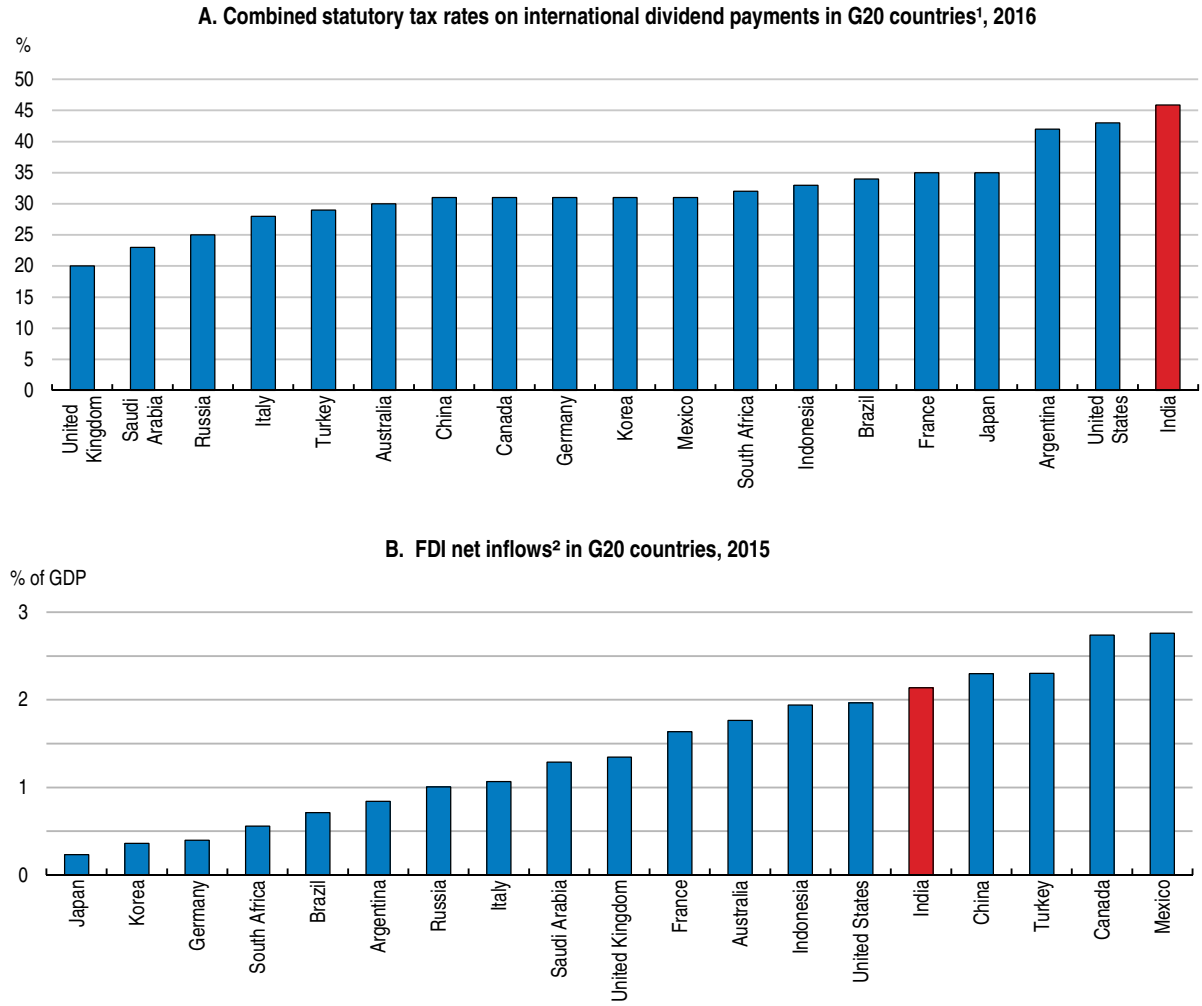
A number of reforms should be considered to make the tax system more conducive to SME creation and growth and to encourage tax compliance:

- Efforts to simplify tax compliance, including e-taxation, should be continued.
- A swift and full implementation of the gradual reduction of the corporate tax rate from 30% to 25% (together with the removal of most tax concessions) will reduce disincentives towards incorporation.
- For presumptive tax regimes, more consideration should also be given to the relevant profit margins (currently 8% for all enterprises), with potential adjustments over time and across sectors, as is the case in Brazil and France, to more closely reflect the different profit margins of different sectors. This approach has the benefit of aligning better taxable profits with real profits but it also makes the system more complex. To create a smooth path from this regime to the general corporate income tax, eligibility to presumptive taxation could be calculated based on an average of several years. Alternatively, India could follow Mexico in giving firms entering the general corporate income tax system a temporary and graduated reduction in their tax liabilities.
- To encourage formalisation of small and micro-enterprises, tax compliance could guarantee access to specific public services. In Colombia, the 2010 Formalisation and Job Creation Law embodied reduced tax and social security contributions for some years; simplified administrative and legal procedures; and guaranteed access to government support programmes, including microcredit and training (OECD, 2013).

International considerations: attracting foreign investors while addressing base erosion and profit shifting

The relatively high corporate income tax rate has made it difficult for India to attract foreign investment. Whether investing via an Indian-resident subsidiary or a (non-resident) branch, a significantly higher tax burden will be borne on repatriated income as compared to most alternative investment destinations. If a foreign investor operates through an Indian-resident subsidiary, s/he will pay an effective corporate tax rate of 34.6% (30% statutory rate, plus 12% surcharge and 3% cess). In addition, s/he will pay the dividend distribution tax on dividends to the parent company, increasing the total tax rate on repatriated income to 45.9%, much higher than for investment via a subsidiary in most other G20 countries (Figure 1.6.A). For countries that exempt foreign dividend income, this will be a final tax. For countries that do tax foreign dividend income, the difference can be even larger as the dividend distribution tax may not necessarily be

Figure 1.6. **International aspects for the corporate income tax**



1. Foreign source income is assumed to be exempted in the residence countries. For India, the 45% rate comprises the 30% CIT rate on corporate profits, plus 12% surcharge on CIT and 3% cess (on CIT and surcharge amount), plus the 15% dividend distribution tax.
2. FDI net inflows are the value of inward direct investment made by non-resident investors in the reporting economy net of repatriation of capital and repayment of loans.

Source: Reserve Bank of India; Technical Background paper; Brazilian Central Bank; and OECD FDI main aggregates database.

StatLink http://dx.doi.org/10.1787/888933453585

creditable against tax due in the investor's home country, whereas a traditional withholding tax on dividend distribution to a non-resident parent company typically will be (as the dividend distribution tax is a tax on the resident company rather than the foreign investor).

If a foreign investor operates in India through a branch, s/he will pay the higher 40% non-resident corporate income tax rate. The higher non-resident corporate income tax rate was introduced when India moved from an imputation system to the current dividend distribution tax so as to provide broad parity between the taxation of distributed dividends of foreign-owned branches and domestic or foreign-owned subsidiaries. Adding the 5% surcharge and 3% cess will bring the effective tax rate to 43.3% for the foreign investor, i.e. slightly less than the effective statutory rate for resident corporations (Box 1.7).

The high statutory rates, combined with the complexity of Indian tax laws and the uncertainty in their interpretation, has weighed on foreign direct investment (FDI). FDI as a share of GDP has increased steadily since the launch of the *Make in India* campaign but remained lower than in some other emerging economies (Figure 1.6.B). To increase India's attractiveness, the dividend distribution tax should be replaced in the short term by a traditional withholding tax system and the non-resident corporate income tax rate should be lowered to the resident rate. South Africa undertook such a reform in 2012: the "secondary tax on companies" that was paid on all distributed dividends was replaced by a dividend tax which is paid by individuals and foreign shareholders (but may be reduced by tax treaties). Simultaneously, tax rates for foreign firms were lowered to the standard rate (of 28%). In the longer term, India could move back to an imputation system which would allow the imposition of progressive personal income tax rates on distributed dividends to

Box 1.7. **Tax rate calculations for resident and non-resident corporations**

The table below presents a calculation of the tax due on INR 100 of profit earned by an Indian resident vs non-resident corporation with a taxable income of more than INR 100 million (USD 1.56 million), so that the highest surcharge is applicable. For a resident corporation, the after corporate tax profit (INR 65.39) is assumed to be distributed to the shareholder(s) so that the dividend distribution tax (DDT) and associated surcharge and cesses are also payable by the corporation in India.

Table 1.6. **Calculation of the effective statutory tax rate for a resident *versus* a non-resident corporation**

(INR)	Resident corporation	Non-resident corporation
Corporate income	100.00	100.00
CIT rate	30.00	40.00
Surcharge on CIT at 12%	3.60	2.00
Education cess on CIT & surcharge at 2%	0.67	0.84
Higher education cess on CIT & surcharge at 1%	0.34	0.42
DDT at 15% on distributed Dividend	9.81	..
Surcharge on DDT at 12%	1.18	..
Education cess on DDT & surcharge at 2%	0.22	..
Higher education cess on DDT & surcharge at 1%	0.11	..
Total tax paid	**45.92**	**43.26**

Source: Thomas et al. (forthcoming).

domestic personal shareholders. Imposing dividends at the individual rather than corporate level will, however, raise collection costs. It may also be easier to avoid taxes on dividends imposed at the individual level, especially if the Hindu Undivided Family (HUF) system is maintained.

India needs to adjust its tax system to mitigate the risk of revenue losses through multinational companies exploiting mismatches in tax rules. The OECD estimated that the net tax revenue loss from tax planning is 4-10% of global corporate tax revenues (OECD, 2015c). Such "base erosion and profit shifting" (BEPS) activities are of particular concern for emerging economies (Crivelli et al., 2015) which typically rely to a large extent on corporate income tax revenue. India's vulnerability has increased in recent years with the greater openness to trade and FDI. As noted above, international dividend payments from India are subject to the highest combined statutory rate amongst G20 countries, with a more than 10 percentage point difference in most cases. Multinational enterprises (MNEs) investing in India may thus be able to obtain substantial benefits by shifting profits out of India.

International concern regarding BEPS resulted in the launch of the OECD/G20 BEPS project in 2013 and agreement in 2015 on a package of measures to help equip governments with the domestic and international instruments needed to tackle BEPS (Box 1.8). India has participated fully in the BEPS project and has agreed to implement the minimum standards agreed in the BEPS package. As part of continuing efforts to boost transparency by MNEs, India also signed the *Multilateral Competent Authority agreement for the automatic exchange of Country-by-Country reports*.

To improve certainty for foreign investors following recent tax disputes, several measures have been taken. First, the government announced in 2014 that no further retrospective legislation adverse to taxpayers will be introduced. Second, in respect of the existing retrospective amendment regarding the taxation of indirect transfers, the government has set-up a high-level committee to determine the appropriateness of the application of the retrospective legislation on a case-by-case basis. Third, the government has provided legislative clarity that the minimum alternate tax (MAT) will not apply to non-resident corporations/entities that do not have a permanent establishment in India.

Efforts to prevent tax treaty abuse should continue to be a top priority. India has tax treaties with around 90 countries, many of which were concluded more than a decade ago and are open to abuse. India's treaty with Mauritius, effective since 1983, was of particular concern until recently - Mauritius accounts by far for the largest share of incoming FDI in India (Table 1.7). Since Mauritius does not tax the capital gains which corporations realise on their assets including shareholdings, a clear tax avoidance strategy consisted of investing in Indian listed companies *via* a shell company incorporated in Mauritius. While this strategy was obviously attractive for investors from outside India, frequent concerns were raised that Indian companies were also funnelling money through Mauritius and back to India to avoid paying domestic taxes (i.e. so-called 'round tripping'). In May 2016, the treaty was renegotiated and India will get the right to tax capital gains channelled through Mauritius from April 2017. In addition to the case of Mauritius, India's effective implementation of the BEPS Project Action 6 "minimum standard" will be crucial to preventing treaty abuse.

Box 1.8. **A comprehensive package of measures to address BEPS**

The OECD/G20 BEPS project produced a comprehensive package of measures to address BEPS, including minimum standards, common approaches, best practices and new guidance in the main policy areas:

- Minimum standards have been agreed upon in the areas of fighting harmful tax practices (Action 5), preventing treaty abuse (Action 6), Country-by-Country Reporting (Action 13) and improving dispute resolution (Action 14). All participating countries are expected to implement these minimum standards and implementation will be subject to peer review.
- A common approach, which will facilitate the convergence of national practices by interested countries, has been outlined to limit base erosion through interest expenses (Action 4) and to neutralise hybrid mismatches (Action 2).
- Best practices for countries which seek to strengthen their domestic legislation are provided in the building blocks for effective CFC rules (Action 3) and mandatory disclosure by taxpayers of aggressive or abusive transactions, arrangements or structures (Action 12).
- The permanent establishment (PE) definition in the OECD Model Tax Convention has been changed to restrict inappropriate avoidance of tax nexus through commissionaire arrangements or exploitation of specific exceptions (Action 7). In terms of transfer pricing, important clarifications have been made with regard to delineating the actual transaction, and the treatment of risk and intangibles. More guidance has been provided on several other issues to ensure that transfer pricing outcomes are aligned with value creation (Actions 8-10).
- The changes to the PE definition, the clarifications on transfer pricing, and the guidance on CFC rules are expected to substantially address the BEPS risks exacerbated by the digital economy. Several other options, including a new nexus in the form of a significant economic presence, were considered, but not recommended at this stage given the other recommendations plus Value Added Taxes (VAT) will now be levied effectively in the market country facilitating VAT collection (Action 1).
- A multilateral instrument will be implemented to facilitate the modification of bilateral tax treaties (Action 15). The modifications made to existing treaties will address the minimum standards against treaty abuse as well as the updated PE definition. India has agreed to participate in the ad-hoc group that developed the multilateral instrument in 2016.

Source: Thomas et al. (forthcoming).

Multinational companies can also minimise their worldwide tax liabilities by assigning debt to high-tax locations, such as India, in order to deduct interest payments from profits made in these locations. The literature suggests that the strategic location of debt is one of the quantitatively more relevant tax avoidance techniques (OECD, 2015c). For India, Rao and Sengupta (2014) provide evidence that non-domestic firms pay more interest, and show a higher level of interest payment for any given level of borrowing when compared to domestic firms. To limit debt shifting, India should introduce a fixed ratio rule above which the interest deduction will be disallowed, as recommended in the BEPS Action 4 report.

Table 1.7. **FDI inflows to India, 2015**

	FDI positions (mn USD)	Equity positions (net, mn USD)	Debt positions (net, mn USD)
World	**312 152**	**294 553**	**17 559**
Mauritius	63 077	59 803	3 273
United States	50 152	49 933	219
United Kingdom	45 802	44 868	933
Germany	33 112	32 275	837
Singapore	32 909	29 400	3 508
Japan	24 449	22 287	2 162
Netherlands	14 926	13 277	1 649
Switzerland	14 674	14 304	371
Korea	5 949	4 317	1 633
France	4 474	4 161	313

Source: IMF Coordinated Direct Investment Survey (CDIS).

There is scope to improve the effectiveness of the tax administration and increase compliance

Several measures have recently been taken to reduce tax evasion. The 2015 bill to tackle "black money" – unaccounted money on which tax has not been paid – embodies severe penalties for not filing returns or for filing returns with inadequate asset and income disclosure. Efforts have also been made to reduce the amount of cash transactions, a common feature in the real estate sector where buyers want to minimise the stamp duty. The Tax Department made the quoting of the Permanent Account Number (PAN) mandatory for all transactions above INR 0.2 million and in July 2016, the Supreme Court-constituted special investigation team recommended a ban on cash transactions above INR 0.3 million (around USD 4 700) and a upper limit for cash holdings of INR 1.5 million. In November 2016, the government announced that larger banknotes – INR 500 and 1 000 (USD 7.5 and 15) – would cease to be legal tender (demonetisation, see above Box 1).

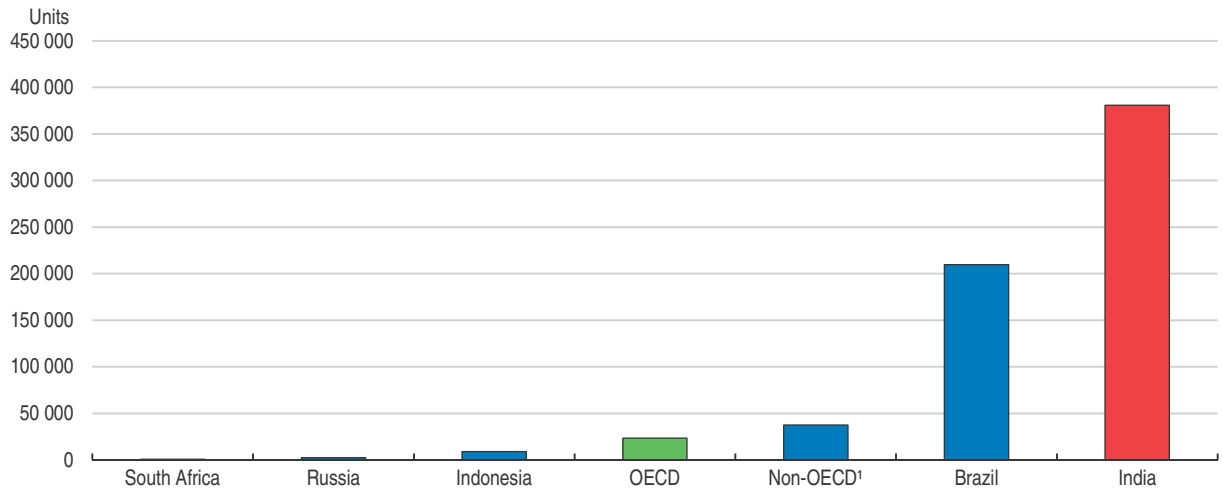
There is scope to enhance revenue performance while reducing compliance and collection costs. Various versions of simplified income tax returns have been introduced since 2015, in an attempt to reach a fine balance between reducing compliance costs and getting enough details to discourage tax evasion. The government is gradually moving towards a paperless tax assessment system, replacing physical visits by email exchanges, with pilots in five large cities. Efforts are also being made to better exploit tax and non-tax information available to the administration by implementing a unique identification number for individuals (Aadhaar) and for enterprises (PAN) which would allow better connecting databases.

Increasing clarity in tax legislation and their implementation

The proliferation of tax concessions and the 2012 amendment to the Income Tax Act which allowed retrospective taxation, together with aggressive audit activity, have raised uncertainty and costs for both investors and the tax administration. The lack of clarity of the Income Tax law, which uses opaque concepts such as "reasonable", "opinion" and "public interest", sets the stage for chronic battles (Shah, 2015). The number of disputes between the tax administration and taxpayers is large (Figure 1.7) and the recovery of tax arrears is low. In addition, around 40% of tax disputes go through the court system and many of them have been in process for several years. In October 2015, the government

Figure 1.7. **Unfinalised tax disputes in India, BRIICS and OECD countries**

2012-13



1. "Non-OECD" is an average of 18 non-OECD countries for which data are provided in OECD (2015d).

Source: TARC (2014), drawing on CBDT and CBEC data, and OECD (2015d), Tax Administration 2013: Comparative Information on OECD and other advanced and emerging economies; Indian Ministry of economics.

StatLink http://dx.doi.org/10.1787/888933453594

announced that it is preparing a roadmap to reduce the number of tax-related litigations. Recent efforts to clarify tax rules (e.g. on the taxation of companies which are part of a consortium in large infrastructure projects or on Minimum Alternate Tax for foreigners) and to abolish tax concessions are welcome. These efforts should be pursued since making tax rules clearer and more certain will help boosting investment and growth.

The low appeal success rate by the tax department further suggests that too many audit cases result in a dispute and, following a decision by the commissioner in the taxpayer's favour, too many cases with limited merit are brought by the Tax Department before the Courts. The government recently decided not to appeal against the high court ruling providing relief to several companies which were contesting notices issued by the Income Tax Department. Dispute resolution procedures have also been recently expanded. For example, the Authority for Advance Rulings (AAR), which was only available in international tax matters, had its scope extended to some categories of resident taxpayers and two additional benches of AAR were created in 2015 (one in Mumbai and the other in Delhi).

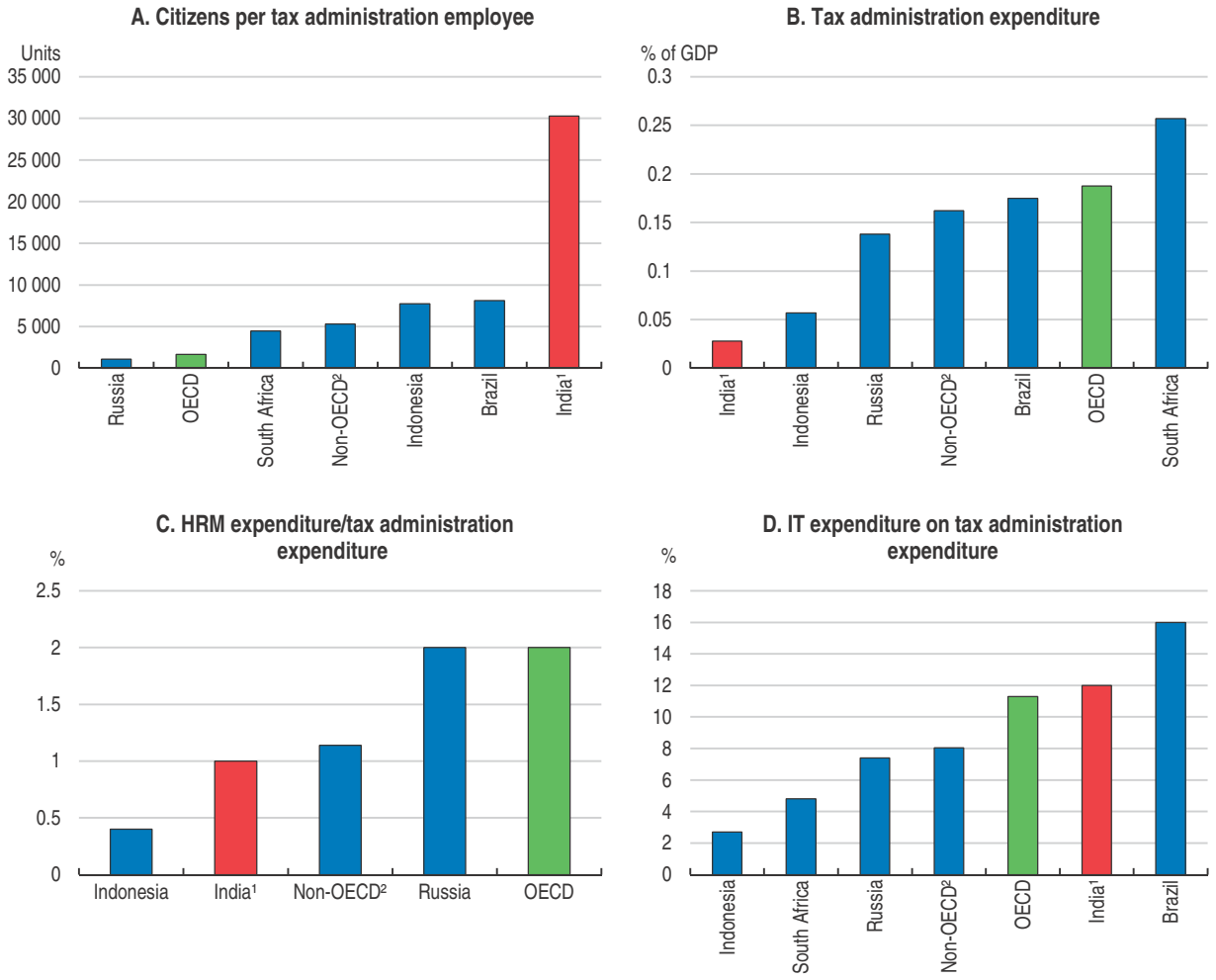
Improving the audit process would help reduce the number and length of disputes. Some measures have recently been taken, including an increased use of third-party data and risk-based analysis to inform audit strategies. The computerisation of the dispute management process has also increased. However, the combination of limited staffing and expertise in particular audit areas (due partly to staff rotation), the lack of clear guidelines in many areas, and a fear of corruption accusations create strong incentives for assessing officers to take a highly defensive approach towards assessments. The imposition of sanctions against assessing officers who are considered by the Comptroller and Auditor General to have under-assessed incentivises a defensive approach towards assessments. The imposition of audit revenue targets on assessing officers also contributes to increase the number of audits. The introduction of a hierarchy of approval in cases where assessments are particularly taxpayer friendly may help to reduce fears of corruption allegations.

India has successfully introduced an advance pricing agreement (APA) programme into its transfer pricing regime. Under the programme, a taxpayer can apply for an APA prior to a proposed transaction taking place, thereby providing certainty as to the taxpayer's transfer prices and avoiding potential future disputes with the tax administration. The APA programme has proved very popular — with more than 700 APA applications filed as of 30th August, 2016 (Government of India, 2016b).The greater use of bilateral rather than unilateral APAs, so as to reduce the risk of double taxation and better ensure that APAs are equitable to all tax administrations and taxpayers involved, would be a positive step.

Increasing the overall capacity of the tax administration

The tax administration workforce should be expanded to raise revenues. Staff numbers have not increased significantly in the past 10 years, despite an expanding tax base and consequent increased workload. They stand considerably below the level in other countries (Figure 1.8.A), with consequences for performance. For example, as a result of the

Figure 1.8. **Tax administration capacity in India is comparatively low**



1. Data for India only relates to the CBDT.
2. Non-OECD is an average of 18 non-OECD countries for which data are provided in OECD (2015d).

Source: OECD (2015d), Tax Administration 2013: Comparative Information on OECD and other advanced and emerging economies.

StatLink http://dx.doi.org/10.1787/888933453602

increased workload, the percentage of cases selected for scrutiny in the Central Board of Direct Taxes has decreased from 8% in 1997-98 to around 1.25% in 2011-12 (Prasanth, 2013). International comparisons reveal that India spends significantly less on tax administration (Figure 1.8.B). Anecdotal evidence suggests that the education level of employees and on-the-job-training below senior levels is a problem. To overcome it, the Tax Administration Review Commission (TARC) recommended that 10% of expenditure be spent on staff training, against less than 1% currently (Box 1.9).

One area that India has prioritised is the adoption of information technology, with 12% of total tax administration spent on it in 2013 (Figure 1.8.D). As a result, about 95% of tax filings at the central government level are electronic and refunds are issued in about a week (Government of India, 2016a, Chapter 7). In 2013, 80% of all personal income tax returns were e-filed, up from 17% in 2009, while the average in OECD countries is 72% (OECD, 2015d). Significant progress with e-taxation has also been made at the state level. Among the 98 points of the action plan for business reform agreed by state governments in December 2014, implementation of tax reform has been the fastest. Most states now allow on-line payment and return filing for various taxes.

Box 1.9. **Key recommendations of the Tax Administration Review Commission (TARC)**

The Tax Administration Reform Commission (TARC) was set up in 2013 to provide recommendations for improving the effectiveness of the tax administration. The TARC proposed modernising the tax administration, in particular moving the culture of the administration towards more customer services and away from the current adversarial culture. Key recommendations from the TARC reports are summarised below:

- Improving coordination between the Central Board of Direct Taxes (CBDT) and the Central Board of Excise and Customs (CBEC) and integrating the two bodies in 10 years. This recommendation has not been accepted as the CBDT and CBEC have distinct domain knowledge, expertise and skill sets. Both are however taking steps to better share data and information and to exploit synergies in policy formulation.
- Relying more on information technology and integrated databases. In particular, pre-filled tax returns should be provided to all individuals.
- Increasing specialisation of tax officers. Raising the quality of tax administration professionals through skill development.
- Minimising the potential for disputes by issuing clear and lucid interpretative statements on contentious issues. This recommendation has been accepted by the government.
- Dispute resolution processes should also be reformed to be faster, less adversarial, more collaborative and customer focused.
- Avoiding retrospective amendment of tax legislation. This recommendation has been accepted by the government and the Finance Minister categorically stated that retrospective amendments will be avoided.
- Creating an tax policy unit, advisory in nature. This recommendation was followed by the creation in February 2016 of a Tax Policy Council headed by the Finance Minister as well as a tax policy research unit.

Recommendations for reforming income and property taxes

Key recommendations

- Implement fully the gradual reduction of the corporate income tax rate from 30% to 25% together with the removal of most tax incentives.
- Gradually increase the number of taxpayers in the personal income tax system by keeping the basic exemption thresholds constant in nominal terms for several years, by treating agricultural income as any other income and by engaging in a communication campaign to raise civic engagement and tax compliance.
- Keep the upper personal income tax threshold constant in nominal terms and reconsider personal income tax concessions which benefit the rich most (in particular those related to housing investment) to gradually raise tax progressivity.
- Enable local governments to raise more revenue from recurrent taxes on immovable property by granting them more, and more certain, taxing powers and by supporting the updating of property registries.
- Secure the corporate tax base by swiftly implementing the BEPS package.
- Increase clarity in tax legislation and its implementation and avoid overly aggressive tax audits.

Other recommendations

Personal and property taxes

- Move towards a more neutral taxation of personal savings. In particular, pension savings should be taxed at least at one stage.
- Introduce an inheritance tax. This would require reconsidering the Hindu Undivided Family (HUF) system whereby property of an individual becomes property of its family members without being subject to tax at the time of the transfer.
- If more revenue is generated from recurrent taxes on property, lower taxes on property transactions gradually.
- Raise the cap on states' professional tax and eliminate the deductibility from the central government income tax.
- Remove the existing bias against job creation embodied in the social security contribution system by either making contributions mandatory for all workers while abolishing caps, or by eliminating social security contributions and financing social security benefits through general taxation.

Corporate income tax

- Improve neutrality across various tax regimes to eliminate disincentives for firms to grow. In particular, easing tax compliance further and creating a smooth path from presumptive tax regimes to corporate income tax would help.
- Adjust presumptive tax regimes to make them fair. Consider introducing a small and easy to comply with, lump-sum, tax to encourage formalisation of micro-enterprises accompanied by guaranteed access to specific public services.
- The renewal of corporate income tax concessions for operating in backward states by the central government should be made conditional on states' action to improve the overall business environment.
- Replace the dividend distribution tax with a traditional dividend withholding tax and lower the corporate income tax rate for foreign companies to the resident rate.

Recommendations for reforming income and property taxes *(cont.)*

Tax administration and legislation

- Efforts to simplify and clarify tax rules should be pursued so as to reduce compliance and collection costs and to boost investment and growth.
- Increase the number and training of staff employed in the tax administration.
- Improve the audit process by providing guidelines and changing the incentive structure for assessing officers.
- Make dispute resolution mechanisms more effective to reduce the share and shorten the length of unresolved disputes.
- Encourage the use of bilateral APAs to reduce the risk of double taxation and better ensure that APAs are equitable to all tax administrations and taxpayers involved.

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Chapter 2

Achieving strong and balanced regional development

While India's per capita income is converging towards that of the richer countries, inequality has drifted up. Spatial inequality – across states and between urban and rural areas – is pronounced, with large differences in output per capita and in access to core public services, such as electricity, roads, and education. Implementing the GST will contribute to reduce trade barriers across states while recent changes in the federalism model are empowering states and promoting experimentation. Prompting states to modernise product and labour market regulations should allow firms in the organised sector to reach an efficient size, and promote job creation and rising incomes in all states. Raising the living standards in poorer states would also require increasing productivity in the agricultural sector by supporting farm consolidation and improving infrastructure in rural areas, particularly roads that connect villages to market towns, crop storage infrastructure and access to sustainable irrigation technologies. As working population moves out of agriculture, urbanisation will gather pace. However, exploiting cities' potential for job creation, productivity gains and improvement in the quality of life would require better physical and social urban infrastructure. Local spending and regulatory competences should be clarified. Performance of local bodies should be assessed regularly to make them accountable. Municipalities should also be granted clear revenue-raising power (in particular property taxes and user charges for urban infrastructure) to enable them to fund better public infrastructure and services.

Introduction and main findings

A key achievement of India is the decline in absolute poverty (Bhagwati and Panagariya, 2013): around 12% of the population (140 million people) was lifted out of poverty between 2004/5 and 2011/12, of which 120 million lived in rural areas (GoI, 2015). Despite this progress, poverty and income inequality remain high. The number of people living below poverty line is geographically concentrated in rural areas and in urban slums. The poverty rate is also much higher in some states. The gap in GDP per capita between states is large and has widened.

Recent changes in India's federalism model have given states more freedom to modernise regulations while the implementation of the landmark GST reform will contribute to make India a single market. The top-down, planning approach, to federalism has been replaced by a bottom-up approach, promoting experimentation and the sharing of experience across states, as the National Institution for Transforming India, NITI Aayog, replaced the Planning Commission. In addition, states are now ranked on the ease of doing business and some have taken the lead in reforming labour and land regulations. The financing system has also changed, as per the recommendations of the 14th Finance Commission, with various conditional and earmarked grants replaced by a larger share of the divisible tax pool, empowering the states to tailor public services to local needs. These reforms give each state, even the poor, more freedom and incentives to reform. Reducing spatial disparities further will require however additional reforms.

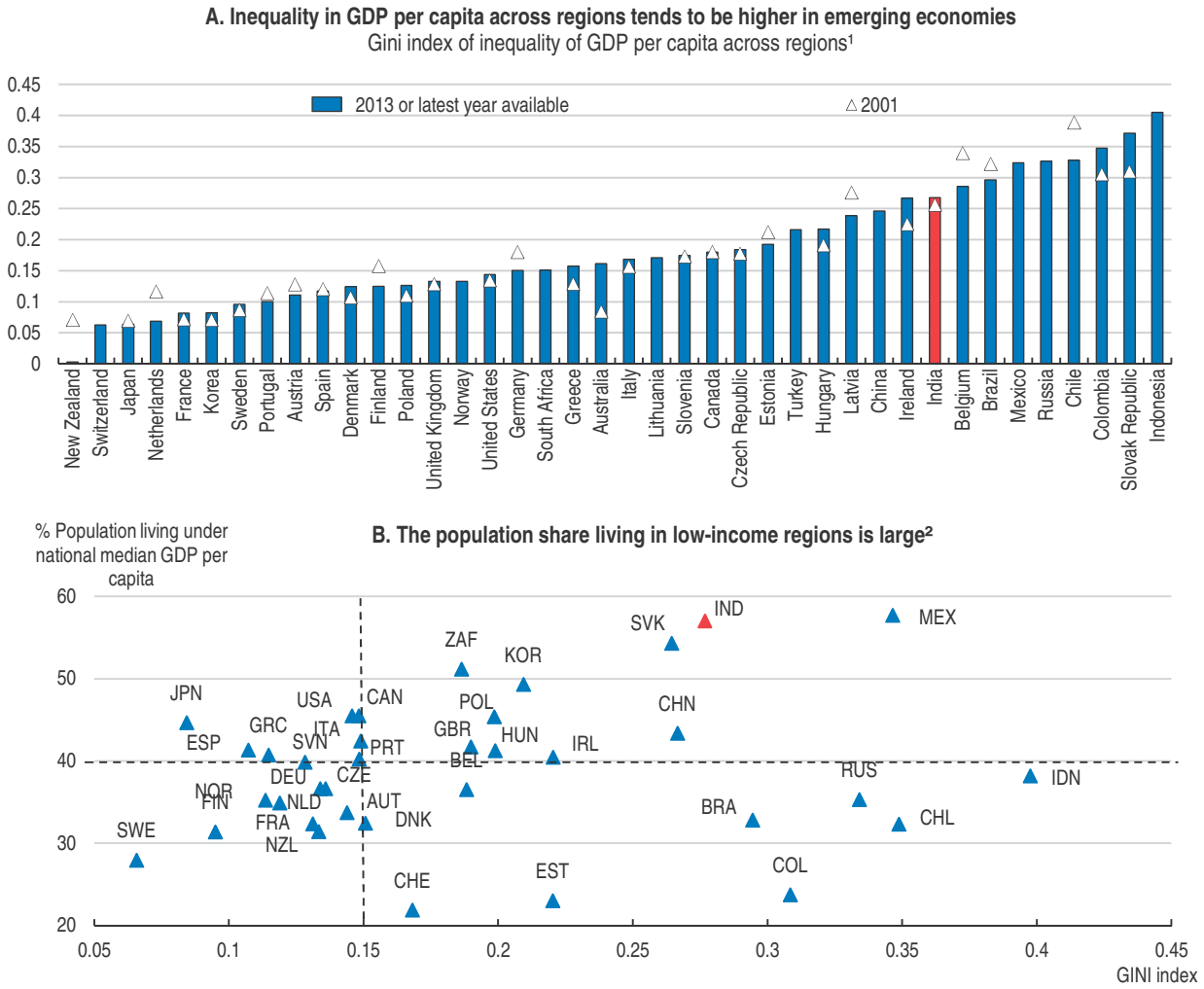
This chapter first shows that the spatial component of poverty and inequality is sizeable. Spatial inequality in output per capita is often accompanied by inequality in access to core public services. Rural areas fare particularly poorly in this respect. The chapter then reveals that inequality across states largely reflects the activity mix – in particular the agriculture share in output – and large productivity gaps. Despite the many programmes to support the agriculture sector, productivity is low. The lack of qualifications, combined with the low number of job openings, has slowed the transition from agriculture to other more productive activities. Large gaps in productivity across states also arise in the organised manufacturing sector, partly driven by policy, including social and physical infrastructure but also product market regulations (PMRs) that differ across states. Improving the ease of doing business, as promoted by the *Make in India* initiative, coupled with federalism reforms, could have a significant impact on incomes and job creation. Finally, the chapter shows that the transition out of agriculture, large disparities in living standards between rural and urban areas and demographic factors will result in a massive urbanisation process. It suggests reform options to ensure that India gets the most out of urbanisation, in particular more and better jobs and higher productivity, while minimising adverse effects (including urban deprivation and pollution).

Spatial inequalities are large

Inequality across states has increased and is high by international standards

Several indicators can be used to measure regional disparities across states. The OECD commonly uses the Gini index of regional GDP per capita, with equal weights for each region/state regardless of its population size. The index focuses on output rather than income and does thus not include government transfers and remittances from richer to poorer areas. Using this metric, India's regional disparities are large compared with the OECD average, as is the case in many other emerging economies (Figure 2.1.A). In 2013, output per capita in the poorest state (Bihar) was just 13% the level of Delhi, one of the richest territories. Although the regional Gini index for India is broadly at par with China, the share of the population living in low-income regions in India is much higher (Figure 2.1.B), making poverty a more pressing issue.

Figure 2.1. **Income inequality across states is large**



1. The Gini index is a measure of inequality among all regions of a given country. The index takes on values between 0 and 1, with zero interpreted as no disparity. It assigns an equal weight to each region regardless of its size. Differences in the values of the index among countries may partly reflect differences in the size of regions in each country.
2. The dashed lines show the median for the corresponding indicators.

Source: OECD Regions at a Glance 2013; and OECD Regional Economy database.

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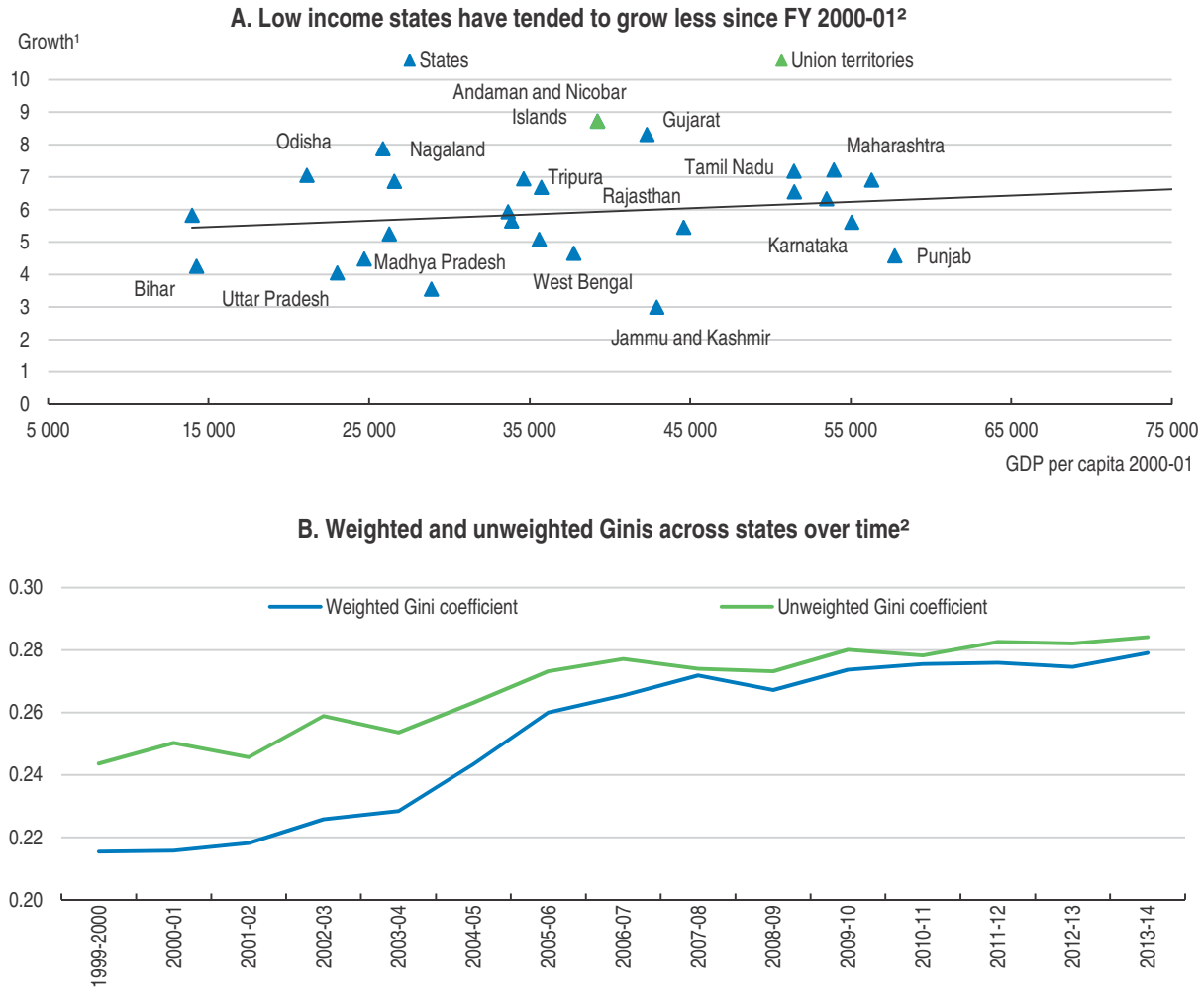
Not only are regional disparities pronounced, they have even increased since the 1990s (Ahluwalia 2000; Sachs et al., 2002). Using output measures reveals that states with a low GDP in 2000 have tended to grow less rapidly than those with a higher GDP per capita (Figure 2.2.A). This is also reflected in the increase of the regional Gini coefficient, be it adjusted or not for the size of the population (Figure 2.2.B). Using consumption data from the NSSO household surveys displays the same pattern, with a drift-up in regional Gini coefficient. There are exceptions, however, suggesting that policy matters. Bihar, for instance, is a very poor state but signs of catch-up have emerged recently: its per capita income stood at 41% of India's average in FY 2013-14, up from 32% in 2005-06. And the poverty rate has also fallen more than in most other Indian states. Likewise, Rajasthan's per capita income increased from 80% of India's average in FY 2005/06 to 90% in 2013/14.

Figure 2.2. **There is little evidence of catching up of lagging states**



1. Average annual growth of GDP per capita over the period 2000-01/2014-15 at constant prices. India comprises 29 states, which have their elected governments, and 7 union territories, which, unlike the states, are ruled directly by the central government.
2. The population data are from Census 2001 and 2011. For the other years, population was estimated by linear interpolation and extrapolation.

Source: Central Statistics Office; and NSSO.

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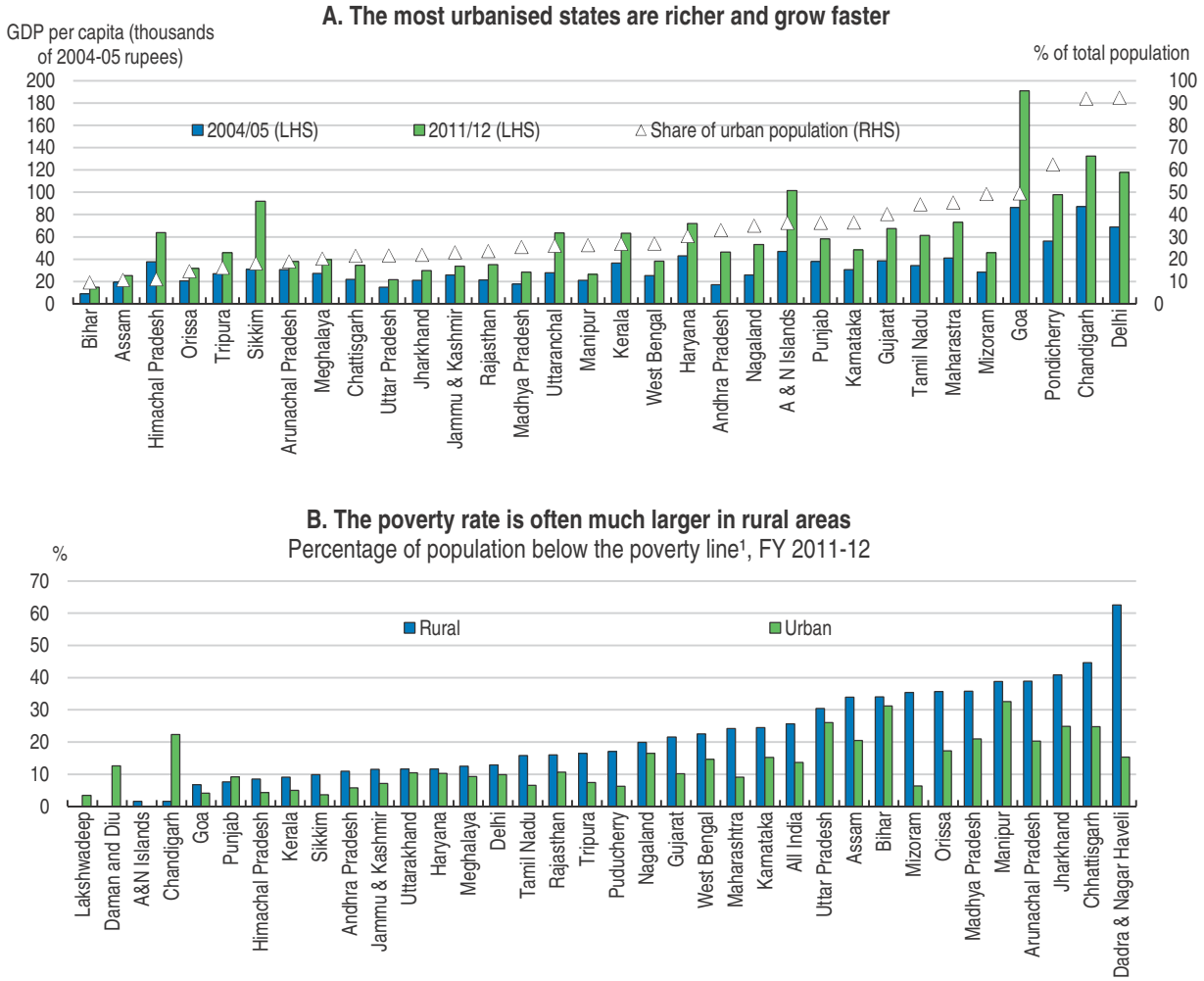
The rural/urban income divide is large

The urban/rural divide accounts for a large share of India's spatial income inequality (Annex A). In the early 2010s, the fastest growing states tend to be those with a large urban population (Figure 2.3.A) and the richest states are the most urbanised. Still, India has lagged behind other BRIICS countries on urbanisation. Rural poverty is both widespread and severe, largely reflecting the very low agricultural productivity. Poverty in rural areas often results in forced migration to cities, distress sales of land and, in extreme cases, suicides. Overall, the absolute poverty rate in rural areas, at 26% in 2011/12, was almost twice the poverty rate in urban areas (Figure 2.3.B), despite a faster decline since the mid-2000s.

Figure 2.3. **The rural/urban income divide is large**



1. Poverty is calculated by using the Tendulkar methodology, which expresses the poverty line in terms of monthly per capita consumption expenditure based on a mixed reference period.

Source: Central Statistics Office of India; and Indian Census, for panel A; and Reserve Bank of India, for panel B.

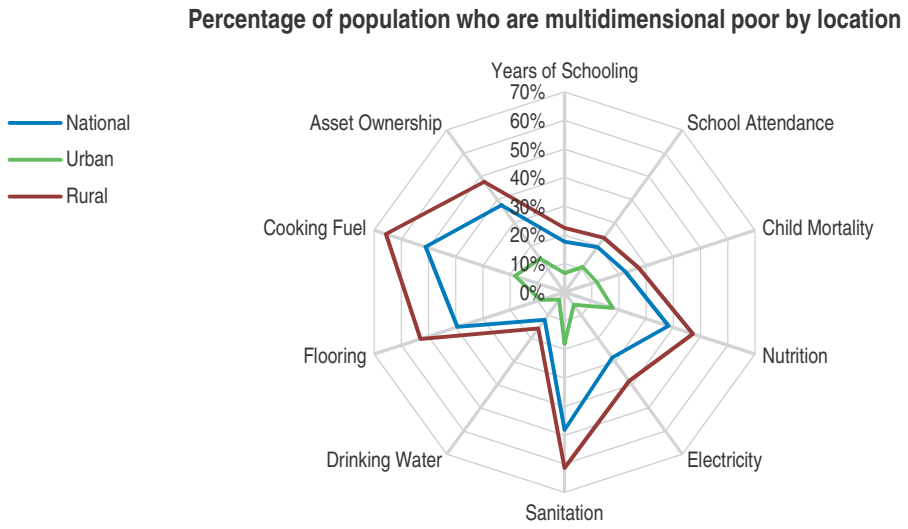
StatLink http://dx.doi.org/10.1787/888933453638

Differences for non-income dimensions are even larger between rural and urban areas

Access to public services, in particular water provision and sanitation, electricity and health care facilities, is a key element of well-being. These services are also important drivers of growth. In India, population coverage for these services has improved, but remains low by BRIICS standards. The government has developed methodologies, including human development criteria, to gauge states' development level and needs and allocate central government transfers (Government of India, 2013). The Oxford Multidimensional Poverty Index (MPI) suggests that deprivation in education, health and living standards (which covers various aspects of living condition such as electricity and sanitation) is even higher than in income (OPHI, 2015). Access to core public services is also highly spatially concentrated, with 69% of the rural population multi-dimensionally poor compared with 31% in urban areas. The rural/urban divide is particularly marked for electricity and sanitation (Figure 2.4).

Access to health care also varies significantly across states and between rural and urban areas (OECD, 2014a). Life expectancy has improved and the disparity in life expectancy between rural and urban areas has declined. Still, rural areas and urban slums lack an adequate number of health professionals (Sharma, 2015). While OECD work based on cross-country comparisons suggests that the income level is an important determinant of the population health status (OECD, 2010), drawing comparisons across states in India reveals that the population in poorer states does not consistently have a lower life expectancy. As an example, life expectancy at birth is significantly higher in Kerala (74 years) than in richer Haryana (67 years). Health care provision is mainly under the states' responsibility. However, poor states do not systematically fare poorly as regard the number of hospital beds per capita, suggesting that states' policies and priorities matter.

Figure 2.4. **Access to public services: the rural/urban divide**



Note: The multidimentional poverty index uses 10 indicators to measure poverty in three dimensions: education, health and living standards (electricity, sanitation, drinking water, floor, cooking fuel, assets). This chart shows the percentage of population who are poor on each of the ten dimensions.

Source: Oxford Poverty and Human Development Initiative (2015), Global Multidimensional Poverty Index Databank. OPHI, University of Oxford.

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Output inequality across states: drivers and policies to address them

Gaps in productivity play a large role

Gaps in GDP per capita, both across countries and across states, can be decomposed into differences in productivity, labour resource utilisation and demographics (Box 2.1). The OECD publication *Going for Growth* reveals that income per capita in India, like in other BRIICS countries, is much lower than in OECD countries. India's employment rate is relatively low but raising labour productivity is an even more important challenge. Within India, the same analysis reveals that differences in productivity are also by far the most important factor driving differences in per capita output across states (Figure 2.5). Productivity in the three poorest states (Bihar, Uttar Pradesh and Assam) was less than one third the level of Haryana.

The employment rate tends to be higher in poorer states as the economic participation of women often decreases as household income rises (OECD, 2014a). In contrast, demography, as measured by the working-age to total population ratio, tends to be slightly more favourable in richer states, though again differences across states are small.

Focusing on growth patterns across states, three main messages emerge:

- **Productivity gains** are key. Most of the growth in GDP per capita across states over the period 2000/01 to 2011/12 is explained by productivity gains (Figure 2.6).
- All the 34 Indian states and territories have benefited from a "**demographic dividend**" – the share of the working age in total population increased by 4.5 percentage points for India as a whole and by more than 5 percentage points in some states and territories (including Delhi, Haryana, Punjab and Rajasthan). However, states with faster growing workforces have not performed better in terms of per capita income growth. Structural bottlenecks have likely impeded the transformation of favourable demographics into job creation and output growth.
- The **employment rate** declined in a large majority of states (Kerala is one of the few exceptions), with slightly higher education attendance accounting for only a small fraction of the overall decline (OECD, 2014a).

Promoting productivity growth in all Indian states

Each Indian state can introduce reforms to boost productivity and thus the well-being of its population. Priorities will, however, differ according to the size of the agricultural sector, the quality of human and social infrastructure, as well as product and labour market regulations set at the state level in India.

Raising productivity in the agricultural sector

Raising productivity in agriculture is key to boosting incomes in poorer states and reducing poverty in rural areas. Differences in productivity across states are highly correlated with the weight of agriculture in the state's economy (Figure 2.7.A). Employment in agriculture, at 49% of total employment in 2012, is still very high by BRIICS standards while productivity is low (Figure 2.7.B&C). Rice yield in India is just 55% of rice yield in China and much lower than other major rice producing countries like Bangladesh, Indonesia and Vietnam (NITI Aayog, 2015). The average yield for the main food grains, wheat and rice, which are grown on the most fertile and irrigated areas in the country, are significantly below Chinese yield (Government of India, 2016).

Box 2.1. **Understanding differences in GDP per capita across countries and states**

Gaps in GDP per capita level can be decomposed into:

- Productivity (GDP per employed person);
- Employment rate (employed person to working age population);
- Demographic factors (working-age to total population)

Similarly, differences in GDP per capita growth across states can be decomposed into: differences in productivity gains, changes in employment rates as well as a demographic dividend.

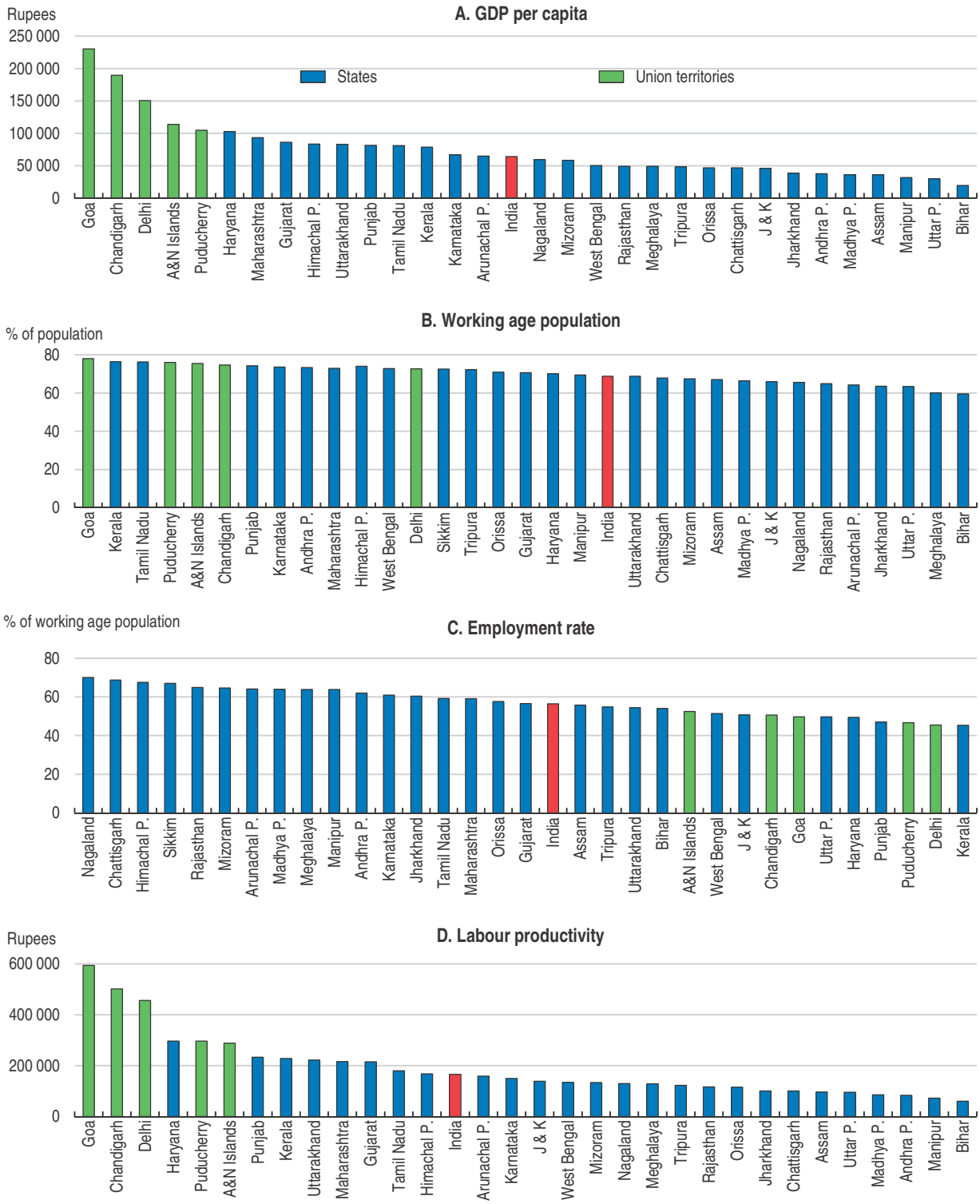
Many farmers are extremely poor (Government of India, 2014): 36% of agricultural households live below poverty line and an additional 5% are in extreme poverty (i.e. entitled to an *Antyodaya* ratio card). They are poorly equipped and their crops are heavily dependent on seasonal rains.

A wide range of input subsidies, price support and other supply-side programmes have been used to support farmers and stabilise consumption prices (Box 2.2). Fertiliser subsidy is the second largest subsidy in the central government budget after food and petroleum, amounting to 0.5% of GDP in FY 2015/16. The generous subsidy to urea has led to a high use of nitrogen fertilisers (Figure 2.7.D), polluting water resources. It has also led to misuses, like smuggling to neighbouring countries and use for non-agricultural purposes (Gulati and Banerjee, 2015). Since other nutrients, phosphates and potassium, receive subsidy per active unit, the overall use of fertilisers is unbalanced, which affects soil fertility. Urea subsidies may also have led to a misallocation of resources as agricultural commodities which are less fertiliser intensive receive less support.

To promote a more effective use of fertilisers and to raise productivity, the government has recently intensified technical assistance to farmers. The government has required urea producers to shift to neem coated urea for the subsidised part of the production since 2015 and has asked states to educate farmers on the benefits and use of neem coated urea. *Soil Health Cards* launched in February 2015, with crop-wise recommendations for nutrients and fertilisers, should be provided to all 140 million farm households within three years. Progress across states has been uneven so far – Tamil Nadu, Gujarat, Andhra Pradesh and Haryana have taken the lead. This welcome initiative should be accompanied by a gradual replacement of fertiliser subsidies, which mostly benefit fertiliser manufacturers, by a direct cash transfer which should be targeted at poor farmers.

Loan subsidies have failed to give a durable boost to productivity. Agriculture figures prominently on the list of Priority Sector Lending (PSL), with a target of 18% of overall commercial bank lending. The government also provides a 2% subsidy on short-term crop loans of up to INR 300 000 and an extra 3% for the prompt re-payment of loans. This subsidy, by discriminating against long-term loans, has impeded long-term investment and thus failed to boost productivity. In addition, agricultural loans have often failed to reach small farmers who continue to depend on expensive money lenders.

Figure 2.5. **Gaps in GDP per capita across states are largely due to productivity differences**



Note: The working age population ratio is the percentage of population aged 15 or older as a per cent of the total population; the employment rate is the number of employed as a per cent of the population aged 15 or older; labour productivity is measured in terms of GDP per worker. Data refer to 2011. For Sikkim, the GDP and productivity data are not shown as they present anomalies. P. stands for Pradesh. J&K stands for Jammu and Kashmir.

Source: Central Statistics Office of India; and Census of India.

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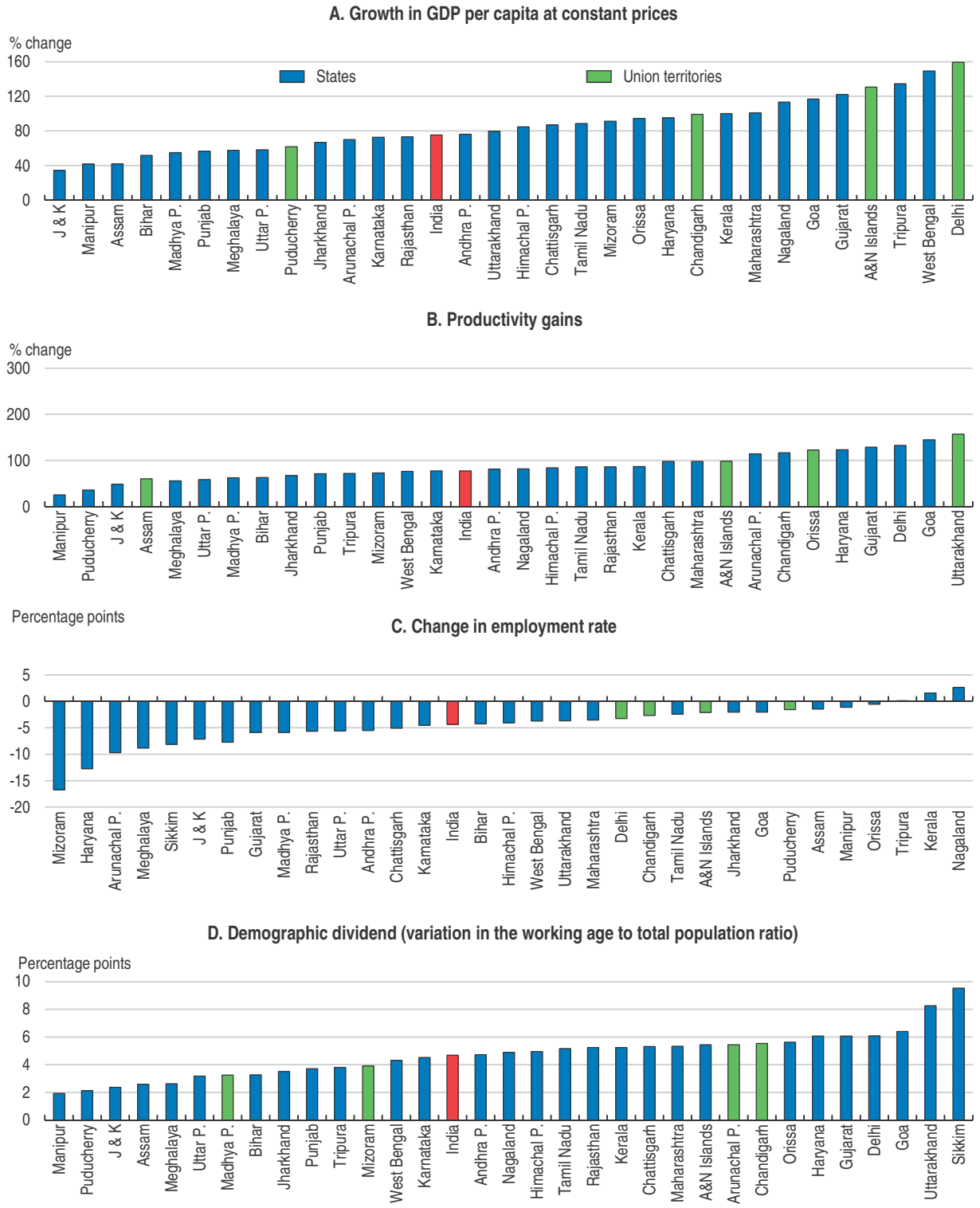
Figure 2.6. **Explaining growth pattern across states over the period 2000-01 to 2011-12**



Note: The working age population ratio is the percentage of population aged 15 or older on total population; the employment rate is the ratio of the total number of employees on population aged 15 or older; labour productivity is measured in terms of GDP per worker. Data refer to 2011. For Sikkim, the GDP and productivity data are not shown as they present anomalies. P. stands for Pradesh. J&K stands for Jammu and Kashmir.

Source: Census of India; and Central Statistics Office of India.

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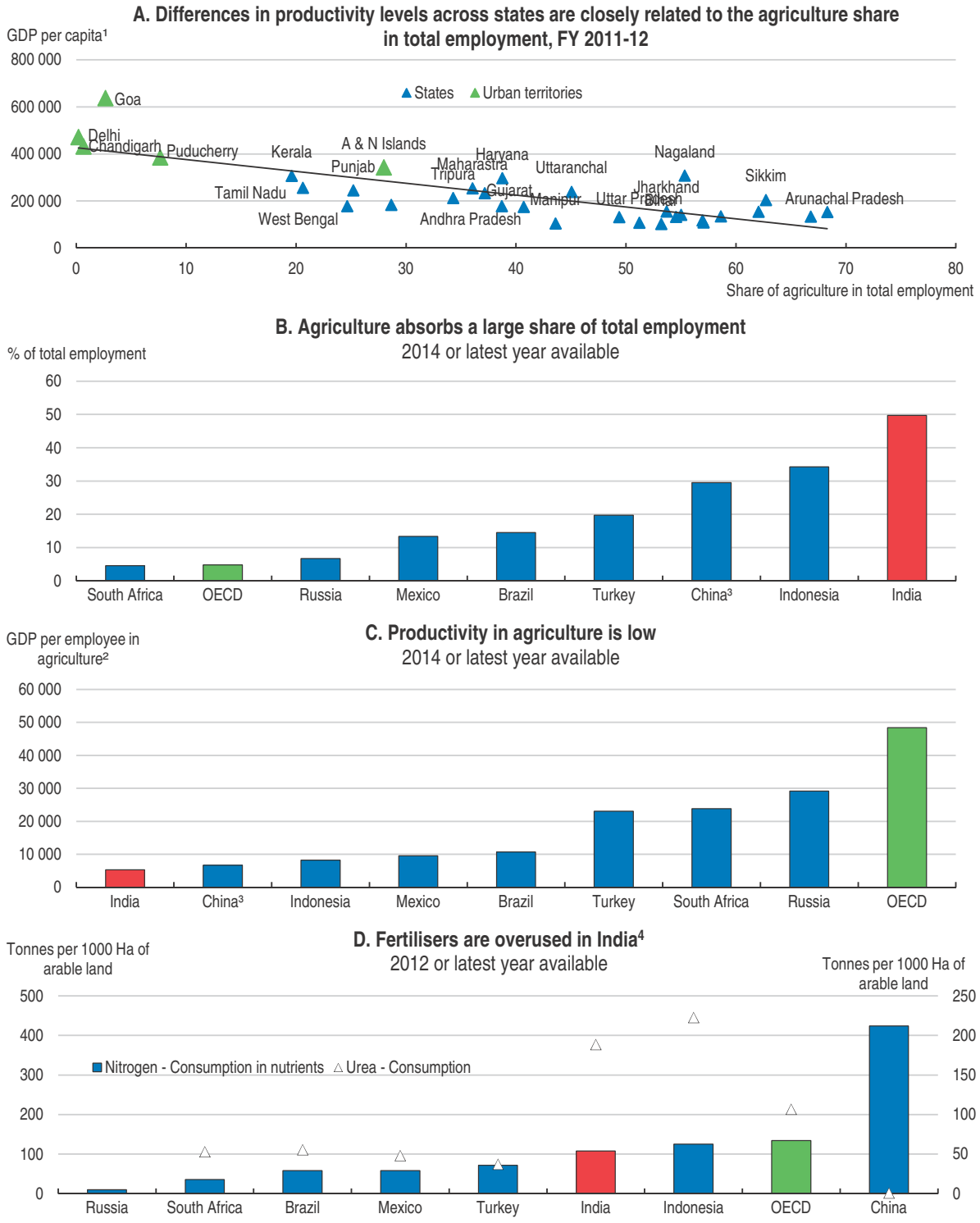
Figure 2.7. **Agriculture: a key factor behind income dispersion across states**



1. In current rupees per capita.
2. In constant PPP USD per employee.
3. Employment data for China refer to the primary sector (including farming, forestry, animal husbandry and fishery).
4. Consumption refers to the quantity of fertilisers consumed for agriculture production, expressed in product weight. Consumption in nutrients is calculated based on the quantity of nutrients contained in the fertilisers used.

Source: NSSO, for panel A; World Bank and National Bureau Statistics of China, for panels B and C; and FAO, for panel D.

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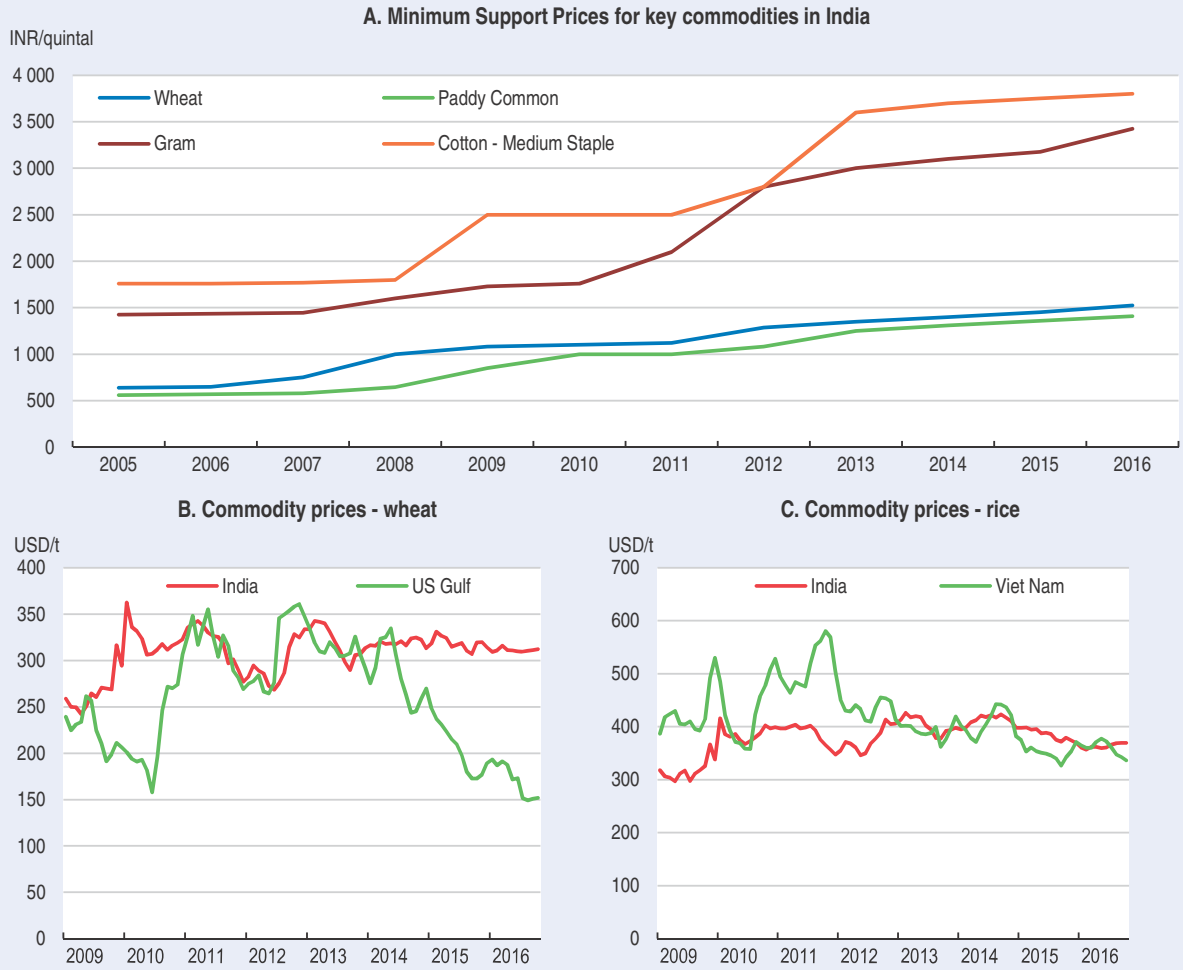
Box 2.2. **Minimum support prices and tariff/border measures for agricultural products**

The Agricultural Prices Commission was set up in 1965 to advise the government on price policy for agricultural commodities. Currently the Commission sets Minimum Support Prices (MSPs) for 24 commodities and a Fair and Remunerative Price (FRP) for sugarcane. The MSPs for all commodities increased sharply after 2007-08, after a long period of near stagnation (Figure 2.8.A). Procurement has been used in some cases to ensure that prices do not fall below the MSPs. Large public stocks have created challenges, with large food wastage reflecting inappropriate storage and distribution. Recently, the active management of food stocks has contributed to reduce food price pressures.

The operation of MSPs also relies on tariff/border measures. Tariffs on a number of commodities were lowered after 2008. In 2015, tariffs stood at 50% for wheat, 80% for rice and 31% for meat. Export bans were also implemented for rice and wheat to reduce price volatility and ensure a stable domestic supply (Figure 2.8.B).

Figure 2.8. **Prices of key agricultural products**



Source: Indian Department of Agriculture and Cooperation; Indian Department of Consumer Affairs; World Bank Global Economic Monitor Commodities database; and OECD Economic Outlook 100 database.

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At the state level, subsidisation of electricity for farmers is nearly universal. As an example, Andhra Pradesh provides free electricity to farmers during off-peak hours to help activities like irrigation. Subsidised or free electricity help low-income farmers to pump water that they could not otherwise afford. Chatterjee (2015), however, finds that crop yields were unaffected by the policy, even though farmers tended to use more electricity-intensive irrigation methods. Low power tariffs, combined with the provision of minimum support prices for some water-intensive crops, have led to unrestrained exploitation of ground water. Several reports suggest that actual benefits for farmers are very limited (OECD, 2015a; Kochhar et al., 2015), ultimately penalising agricultural productivity. Electricity subsidies should thus be reconsidered. To protect the income of the rural poor, they could be replaced by direct and targeted income support. The government should also support alternative irrigation methods, e.g. drip irrigation, which reduce the consumption of water, electricity and fertilisers, e.g. leveraging on the Rural Employment Programme (NREGS) as well as dedicated training and loan programmes. To promote efficient irrigation practices, the government started to implement the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), which aims at providing end-to-end solutions in the irrigation supply chain, including water sources, distribution network and farm level applications.

The small size of farms is a key structural barrier to productivity gains as it limits the scope for mechanisation and economies of scale. Of 138 million agriculture landholders, 67% are marginal farmers (having land of less than 1 hectare) with an average of 0.39 hectare (RBI, 2015). The income of the majority of agricultural households is thus very low. Small farmers tended to be disproportionally indebted to money lenders and other non-institutional lenders, with little money left for investment in machinery and equipment (Table 2.1). The fragmentation of land holdings continues (OECD-FAO, 2014), partly reflecting inheritance practices, while the lack of well-established land records hampers the transfer and consolidation of land holdings. The National Land Records Modernisation Programme, including the digitisation of land records, should thus proceed more rapidly, following the lead of some states, including Andhra Pradesh (Gulati and Banerjee, 2015; RBI,2015).

Table 2.1. **Agricultural households: size of land holdings, income, investment and indebtedness**

(FY 2012/2013)

Size of land possessed (hectares)	Share of agricultural households	Average monthly income	Average monthly consumption	Expenditure on productive farm assets		Outstanding loans	
				Average[1] monthly expenditure	Share of machinery and equipment	Average	Share from non-institutional sources[1]
	%	INR	INR	INR	%	INR	%
<0.01	2.6	4 561	5 108	281	7.1	311	85.0
0.01-0.40	31.9	4 152	5 401	287	16.0	239	53.0
0.41-1.00	34.9	5 247	6 020	837	44.3	354	46.8
1.01-2.00	17.1	7 348	6 457	1 741	17.4	548	35.1
2.01-4.00	9.4	10 730	7 786	1 667	47.6	949	32.5
4.01-10.00	3.7	19 637	10 104	2 805	57.9	1827	28.5
10.00+	0.4	41 388	14 447	9 568	46.6	2903	21.0
Weighted average		6 426	6 223	1 013	35.2	470	40.2

1. Includes loans from employer/ landlord, agricultural/ professional money lender, shop keeper/ trader, relatives/ friends and others.

Source: NSS Report No.576: Income, Productive Assets and Indebtedness of Agricultural Households in India.

Regulation and fragmentation of agricultural markets weigh on farmers' income and ability to invest and become more productive. The Agricultural Produce Market Committee (APMC) Act enacted by state governments provides that first sale in some commodities (cereals, pulse, edible oilseeds, fruits and vegetables, chicken, etc.) can only be conducted under the aegis of the APMC through agents licensed by the APMC. This involves various fees and charges (including a market fee for buyers and a licensing fee for agents which mediate between buyers and farmers), amounting to up to 15% of the Minimum Support Price set by the government in the case of wheat (Government of India, 2015). Such an approach results in highly fragmented markets for agriculture products, with large price differences, as well as in a significant wedge between retail prices and farmer payments.

The central government developed a model APMC Act in 2003 which provided farmers more freedom to access the market and tried to convince the states to modify their respective APMC Acts. While some states did, further deregulating agricultural markets is needed to increase farmers' income. More investment is also needed to meet transport and storage needs. Deregulating foreign direct investment restrictions in retail trade would help attract FDI and complement domestic investment. With the objective to reform the agriculture marketing system, a National Agriculture Market (e-NAM) portal has been launched which provides a pan-India electronic trading platform. NAM seeks to network the existing APMCs and other market yards to create an unified national market for agri-commodities. In February 2017, 250 markets from 10 states had been integrated with the new platform.

Shifting resources to high productivity sectors, in particular organised manufacturing

The reallocation of resources from low to high productivity sectors, typically from agriculture to industry and services, and from the unorganised to the organised sector, should be a key engine for economic growth. Based on an empirical analysis of 16 Indian states over the 2000-06 period, Cortuk and Singh (2015) found that changes in the activity mix cause growth, and not the reverse. Some service sectors, in particular financial and IT activities, have performed well in terms of value added creation and exports. They are highly skill-intensive and cannot create sufficient jobs to match the supply of labour. Manufacturing has to take the lead. Amirapu and Subramanian (2015), however, revealed that in several states, including Gujarat and Maharashtra, resources (jobs in particular) have mostly shifted from agriculture to the unorganised manufacturing sector, itself characterised by relatively low productivity and poor work conditions (Box 2.3). The reallocation of resources has thus contributed little to boost growth and quality job creation.

Policy has a role to play in supporting productivity growth and the reallocation of resources to the organised manufacturing sector. The 2014 *OECD Economic Survey of India* showed that the manufacturing sector contributed little to income and job creation as it was suffering most from structural bottlenecks, including frequent power outages, below par transport infrastructure, complex administrative requirements, as well as high taxation and stringent labour regulations. The central government has recently reduced barriers to FDI, made it easier to comply with regulations, reformed the bankruptcy laws, supported investment in infrastructure sectors and put back on track several projects, in particular roads. However, more needs to be done to unlock the potential of the organised sector as suggested by both the 2013 version of the OECD PMR indicators and the 2017 edition of the World Bank Ease of Doing Business index: by international comparison India still struggles with administrative rules for starting a business, dealing with construction permits, paying taxes and getting credit.

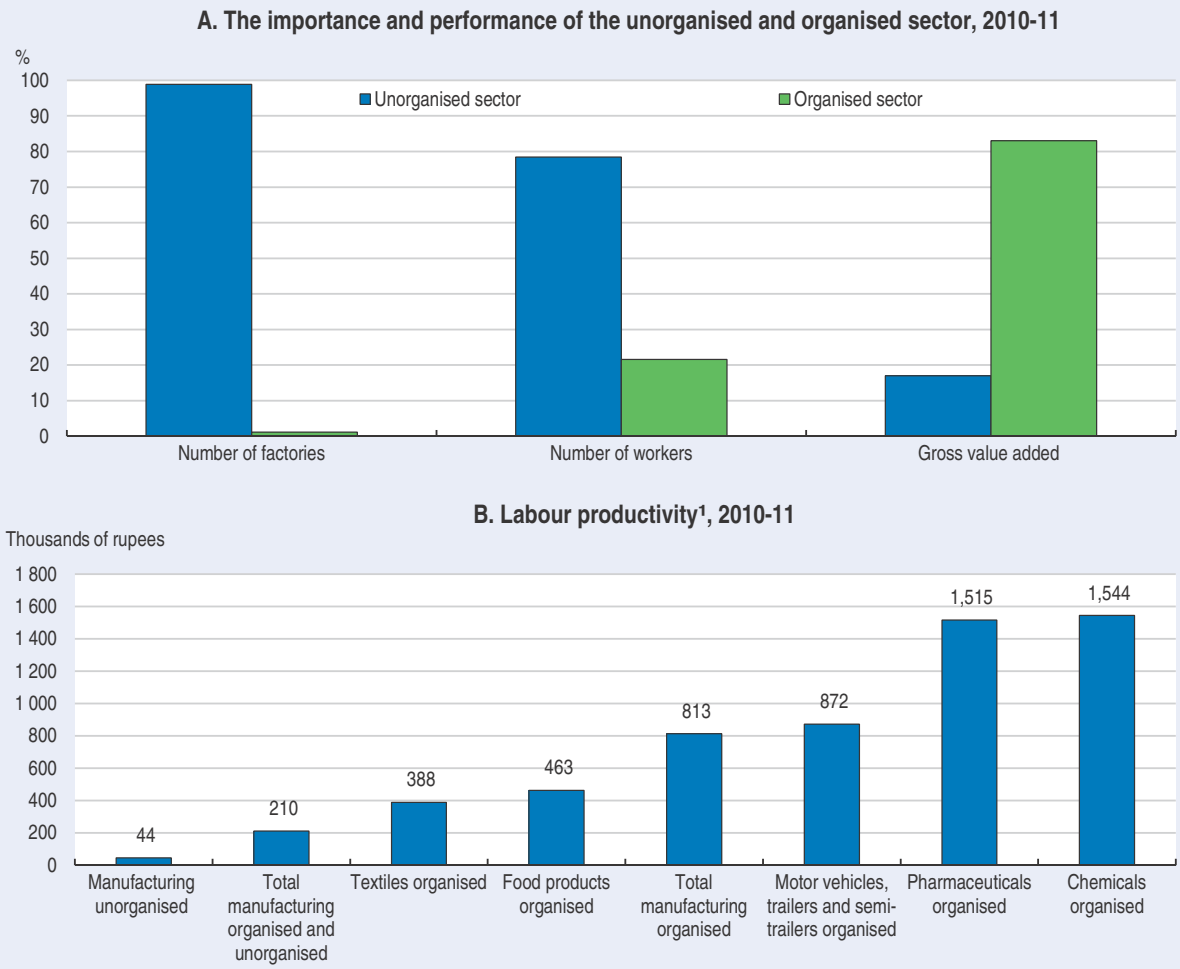
Box 2.3. **Organised versus unorganised manufacturing sectors: definition and contribution to job and value added creation**

The *unorganised sector* consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten workers (or twenty if not using electricity).

The *organised sector* consists of all public sector enterprises and all private sector enterprises with more than 10 workers (more than 20 if not using electricity).

Although the unorganised manufacturing sector accounts for the bulk of total manufacturing factories and jobs, it contributes only little to the value added of the manufacturing sector (Figure 2.9). Productivity in the unorganised manufacturing sector is almost 20 times lower than in the organised sector. Less than 1% of the workers employed in the unorganised manufacturing sectors are entitled to social security benefits, compared with 70% in the organised manufacturing sector (Mehrotra et al., 2014).

Figure 2.9. **Firms, employment, value added and productivity in organised and unorganised manufacturing**



1. Productivity is computed as gross value added per worker.

Source: ASI 2010-11, NSS 67th round.

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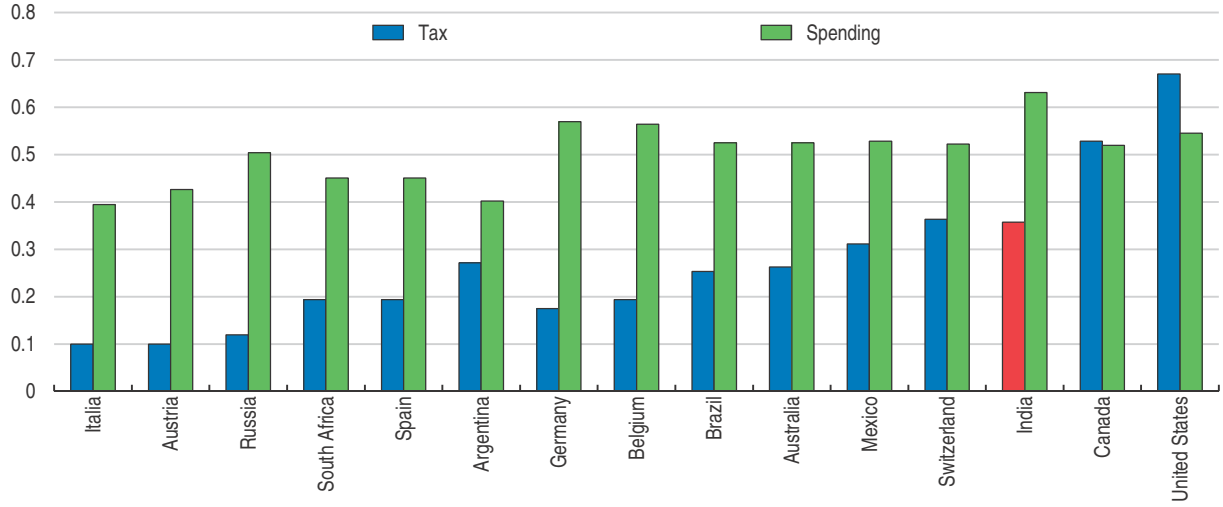
Getting the most out of federalism

States have an important role to play in easing the severity of structural bottlenecks. The Constitution assigns responsibilities, with some exclusively held by the central government ("central list"), some under the exclusive purview of the states ("state list") and some are the combined responsibility of both the central and state governments ("concurrent list"). Agriculture, public health, water supply, urban development and various aspects of economic development are in the state list while education and the environment are in the concurrent list (Rao, 2014). States have some autonomy in setting taxes and enacting labour and product market regulations (e.g. electricity prices and entry conditions). Overall, states' autonomy in setting taxes and spending programmes are relatively high compared with 13 other federations (Figure 2.10). The efficiency of their administration, however, differs. Kato and Sato (2014) show that the degree of corruption, as measured by the official number of cases related to violation of anti-corruption laws varies across states, with a significant negative impact on labour and total factor productivity in the organised sector.

Recent measures have given more financial autonomy to the states and strengthened incentives to pass reforms. The government is promoting a new federalism paradigm – a cooperative and competitive federalism – with less conditional grants from the central government together with more sharing of experience and benchmarking across states (Box 2.4). This new approach could allow poorer states to move fast and start a virtuous cycle whereby they reform, attract more investment, benefit from an improvement in income and well-being, with higher revenues allowing more investment in physical and social infrastructure. Some states have already taken remarkable initiatives to improve the ease of doing business and better respond to the citizens' needs. Rajasthan is a case in point (Box 2.5). The Australian experience shows that strengthening arrangements between states to share best practices or collaborate on common issues (for example, regulatory standards or infrastructure) can enhance productivity and wellbeing.

Figure 2.10. **Tax and spending autonomy of the states: India compared with 13 other federations**



Note: The autonomy indicators capture the assignment of fiscal power across government levels and the extent to which sub-federal governments can conduct policy in the area of taxation and spending. High levels of the indicators are associated with a high level of fiscal autonomy.
Source: OECD Fiscal Network database.

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Box 2.4. **The move to a more co-operative and competitive federalism framework**

Giving more fiscal autonomy to the states by replacing conditional grants by more tax-sharing

Following the recommendations by the 14th Finance Commission, the government increased the states' fiscal autonomy, by raising their share of the so-called "divisible tax pool" (i.e. all central government taxes excluding surcharges and earmarked taxes) from 32% to 42% and by making central government transfers based on more objective criteria, as of FY 2015-16. Government transfers have also been made more progressive as fiscal capacity (defined as the ratio of a state's own revenue to total current expenditure) was given more weight. The budget for some conditional grants, known as "plan transfers" or Central Assistance to States, has been reduced concomitantly. Overall, central government transfers have remained broadly the same in quantitative terms but have improved in qualitative terms (Reddy, 2015) and are more redistributive.

Moving from a top-down approach to the sharing of experience: NITI Aayog

To foster states' participation in policy-making, the NITI Aayog replaced the Planning Commission in 2015, which had implemented a top-down approach to fiscal transfers and central government programmes. Chief Ministers of each state are on the board of the NITI Aayog, which now acts as a think-tank and promote the sharing best practices.

Strengthening competitive pressures across states by ranking them on the ease of doing business

In 2014, the government launched an information system on state regulations and administrative practices, allowing the ranking of states in terms of the ease of doing business. In December 2014, state governments agreed to a 98-point Action Plan on the "Ease of Doing Business", under eight key areas – setting up a business; allotment of land and obtaining construction permits; complying with environmental procedures; obtaining access to utilities (electricity, water, sewage); registering and complying with tax procedures; carrying out inspections; enforcing contracts. The evaluation (World Bank, 2015) for the first half of 2015 suggests that 32% of the proposed reforms have been implemented across the country.

Gujarat scored best on the government scoreboard, reflecting efforts to cut red tape, facilitate land acquisition and provide high quality infrastructure and public goods. Gujarat is one of three states (the others being Madhya Pradesh and West Bengal) with a mandate to issue registrations for value-added tax (VAT) and professional tax in a single day. In many states, the ease of paying consumption taxes (including allowing online payment and return filing of various state taxes, defining timelines for VAT registration) has also improved. Clear timelines have been defined for granting construction permits, changes in land use approvals and electricity connection. Labour regulations have become easier to comply with and more transparent in some states. In particular, self-certification schemes which reduce the number of labour inspections required for registrations, annual return filing and renewal of licences under the various labour acts, have been introduced. Various states have also increasingly relied on application forms that can be filled out and submitted online, with clear timelines and downloadable certificates.

Early in 2017, the government announced that states will also be ranked on logistics performance, with the objective of promoting infrastructure in trade and transport.

Box 2.5. **Rajasthan: recent policy reforms to promote economic development**

Rajasthan is the largest Indian state with 342 thousands km², but it is relatively poor as measured by GDP per capita (see Figure 2.5above). Agriculture accounts for a rather large share of the state's GDP (27%) despite a lack of water. It is well endowed with natural resources and is one of the leading producers of minerals such as lead, zinc and gypsum. The population is younger than in the rest of India, with 45% below age 20 (41% on average in India). The manufacturing sector accounts for only 9% of total employment, with the bulk (89%) in the unorganised sector.

To attract investment and give a boost to employment creation in the organised manufacturing sector, Rajasthan has taken the lead in improving the ease of doing business and strengthening the effectiveness of public administration. It has reformed various labour regulations since 2014, benefitting from Article 254(2) of the Constitution – a rarely used clause through which the president allows state law to override national law. In particular:

- Industrial establishments employing up to 300 workers (up from 100) are now allowed to lay off employees without seeking prior permission of the government (amendment to the 1947 Industrial Dispute Act).
- The 1948 Factories Act, which regulates working time and health conditions at work, now applies to factories with more than 20 (up from 10) workers if they use electricity, and 40 (up from 20) if they do not use electricity.
- Temporary labour is regulated for companies with more than 50 workers, up from 20, under the 1970 Contract Labour Act.
- Membership of 30% of the total workforce (up from 15%) needs to be recorded for a union to obtain recognition – a move that is expected to reduce production losses due to industrial disputes.
- The 1961 Apprenticeship Act was reformed to create larger opportunities of employment for the youth. The State now involves industry representatives more closely in designing training programmes. Training can be outsourced and trainers are better paid. enable the state-level council to settle disputes and also deal with issues related to ethics and environment at the workplace. Similarly, the council, which includes industry representatives, will be able to decide on the level of participation of apprentices, since the numbers vary across sectors. Similarly, the entity can decide on imparting third-party training, which is also expected to drive skill development in the state and help companies bridge the gap of skilled manpower
- Exemptions were introduced to the 1947 Boiler Act. The amendments will allow renewal of licences through recognized agencies and certification by outside bodies, reduciing the so called "Inspector Raj"Licenses can be renewed through recognised agencies. Certification can be made by outside bodies.

To improve the **ease of doing business**, Rajasthan has introduced a Single Window Clearance system. The portal aims to act as a single point of contact for all applications and clearances and provides information to investors on relevant rules, policies and other documents required for engaging in business (World Bank, 2015). Rajasthan has further repealed about 150 outdated laws. Overall, it ranked 6th in the 2015 ease of doing business survey sponsored by the DIPP (World Bank, 2015).

Box 2.5. **Rajasthan: recent policy reforms to promote economic development** *(cont.)*

The state further offers **financial incentives to manufacturing companies**, in the form of tax relief or subsidies, including:

- An investment subsidy amounting to 30% of the state VAT and Central Sales Tax (CST) for seven years (50% and up to 10 years for lagging areas);
- An employment creation subsidy amounting to up to 20% of the VAT and CST for 7 years;
- A 50% reduction in the electricity duty and land tax for seven years;
- A 50% reduction in Stamp Duty on the purchase or lease of land; a 100% exemption from Entry Tax (on the movement of goods from one state to another) to enterprises investing more than INR 7.5 billion;
- A "customised" package for large companies.

Rajasthan also reformed **land legislation** in 2016. The *titling law* now provides statutory backing to land records and effectively guarantee land and property ownership. This will create an efficient, transparent and modern land market, provide certainty of tenure and end litigation that often mires development projects. The certified title would provide clear title over a chain of documents, enable the use of land as an asset for accessing credit and improve the ability to trade property rights legally. Rajasthan also passed a *Land Pooling Schemes Bill* which eases the aggregation of small land holdings and should facilitate the development of infrastructure projects.

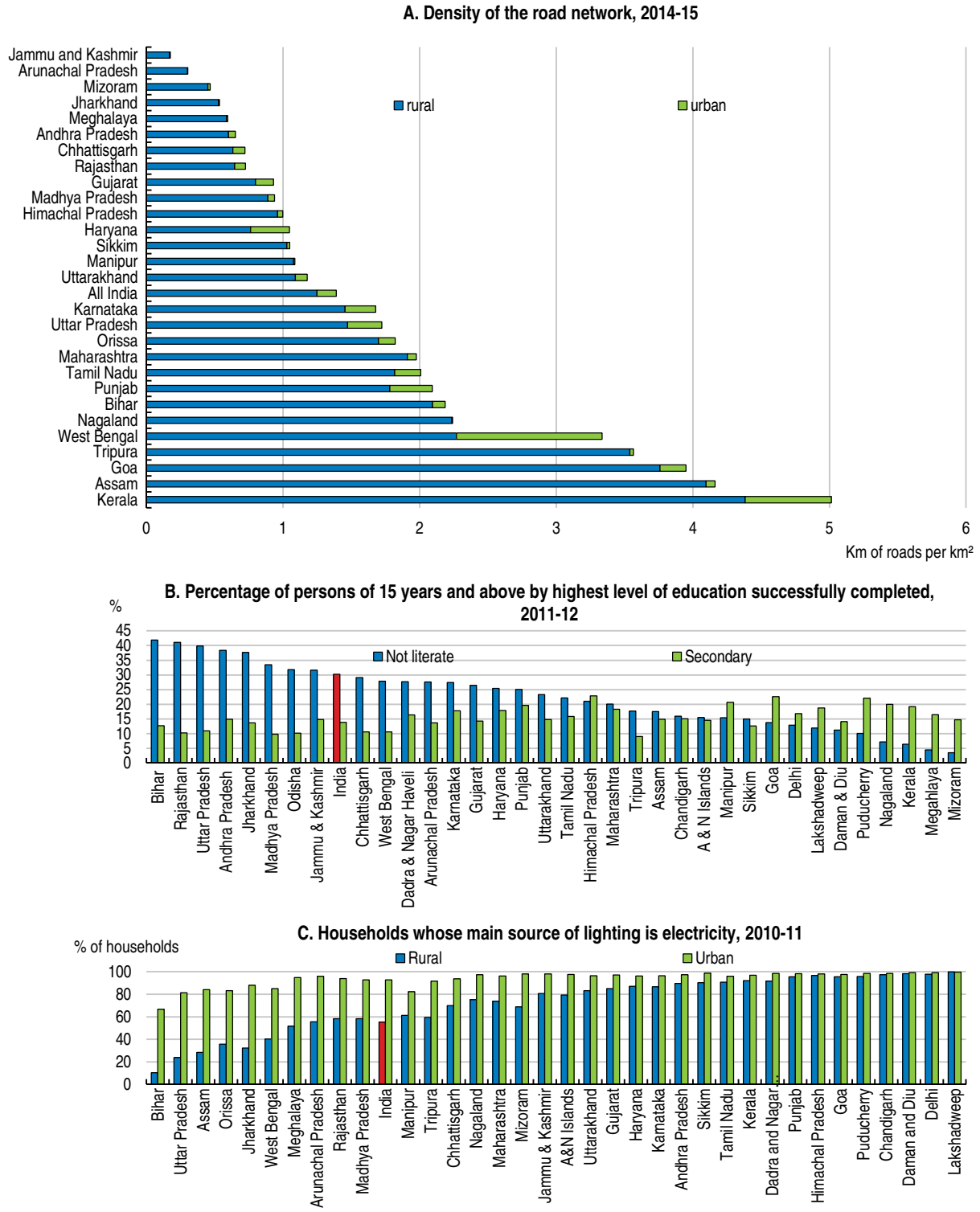
Building up infrastructure and human capital across states

Physical and social infrastructure is key to promote inclusive regional development. Many initiatives have been taken by the central government to improve electricity connections across and within states (*Power for all by 2020*), sanitation (*Clean India*), skills (*Skill India*) and access to various other public services. Despite recent efforts, infrastructure supply remains poor, both in terms of quantity and quality. Many firms face frequent power outages and transport projects often face long delays, weighing particularly on the performance of the manufacturing sector (OECD, 2014a). Policy factors – in particular difficult land acquisition as well as the lack of environmental and other clearances, continue to play an important role. Access to education has been expanded through investment in school infrastructure and recruitment of teachers. Still, differences across states remain wide for many key inputs, including the density of the road network, electricity connections and education (Figure 2.11). Policy at the state level plays a role. The IEA (2015), for instance, noted the success of the state of Gujarat in promoting solar power since 2009 and the relatively low population share without access to electricity.

Reforming product and labour market regulations at the state level

The central government sets trade and foreign investment regulations which are thus uniform across states, although their impact may vary with their industrial specialisation and proximity to foreign markets (Harrison et al., 2011). Many labour and product market regulations are, however, set and implemented at the state level, with significant variations across states. Various studies have shown that differences in the stringency of product and labour market regulations across states are correlated with states' economic performance (Conway and Herd, 2008; Dougherty et al., 2008; Aghion et al., 2008). Kapoor (2014) found that states with less flexible labour market regulations have witnessed slower employment growth in the organised manufacturing sector. The *2007 OECD Economic Survey of India*

Figure 2.11. **The quality of physical and social infrastructure varies significantly across states**



Source: Ministry of Home Affairs; and Ministry of Road Transport and Highways, for panel A; NSS Report No. 566: Status of Education and Vocational Training in India, for panel B; Census of India for panel C.

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built product market regulation (PMR) indicators for 21 Indian states and concluded that states with more competition-friendly regulation have higher labour productivity, attract more foreign investment and have a larger share of employment in the private formal sector. These indicators have not been updated but the same effects can still be observed: stringent PMRs have impeded the shift of resources to the organised manufacturing sector and stifled productivity growth (Figure 2.12).

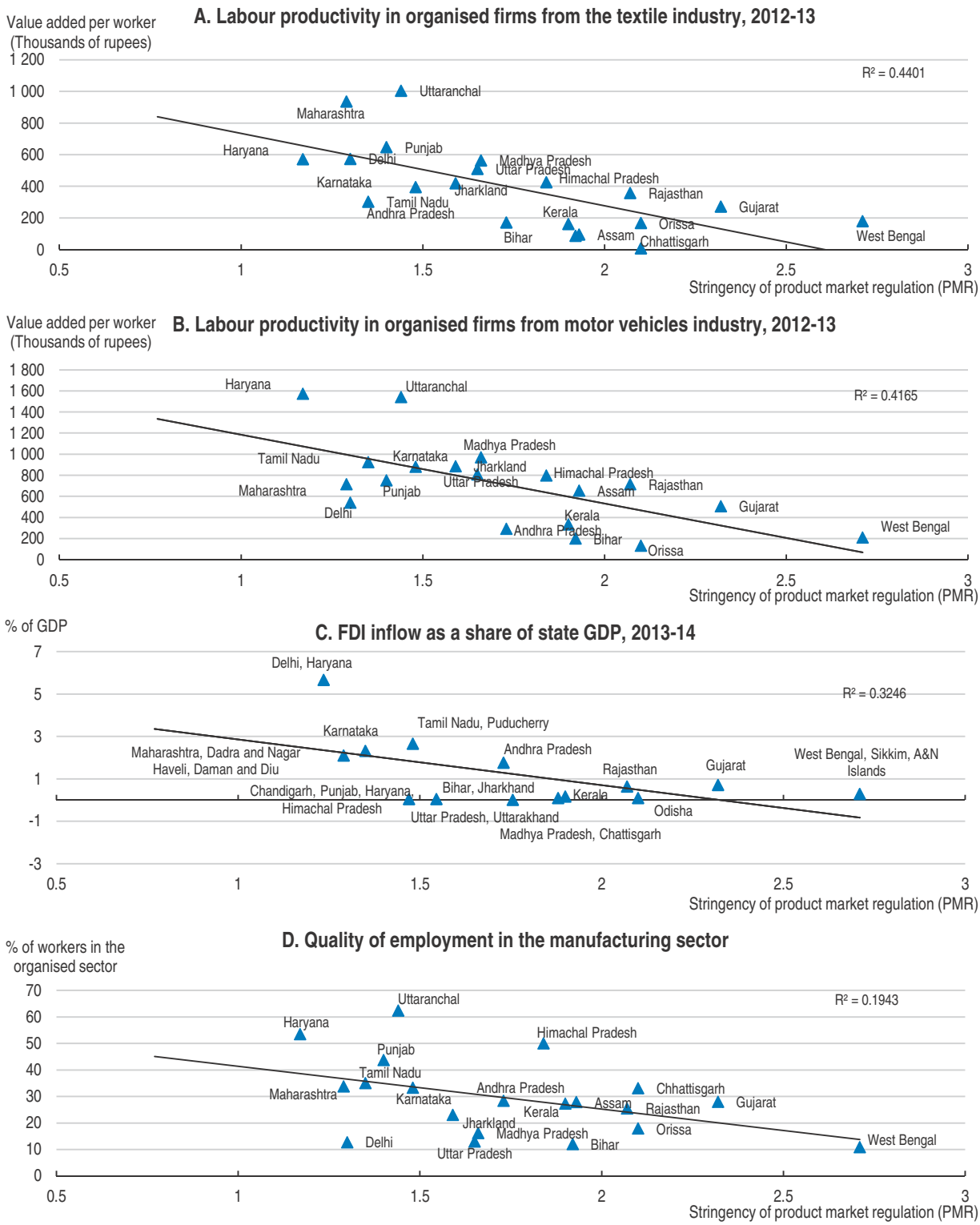
Threshold effects in labour and tax regulations create incentives for firms to stay small while some regulations restrain competitive pressures or lock in resources in firms with low productivity. Productivity in the manufacturing sector is particularly low compared to other emerging economies (OECD, 2014a), partly reflecting the preponderance of very small firms (the so-called "unorganised sector"). Even in the organised sector, firms are relatively small (Figure 2.13), with much lower employment growth over their life cycle (Hsieh and Klenow, 2014), while larger firms tend to have higher productivity. Hsieh and Klenow (2009) estimated that if India were able to align the efficiency of resource allocation to that observed in the United States, productivity could rise by 40% to 60%.

Some states have performed better in enabling firms from the organised sector to reach their optimal size. Focusing on labour regulations, Hasan and Jandoc (2012) showed a greater prevalence of larger firms in states with flexible labour regulations – this applies to labour-intensive sectors, while in other sectors firms do not differ much in size across states. Focusing on product market regulations, OECD empirical work (Joumard et al., forthcoming), implementing the approach suggested by Andrews and Cingano (2014) across OECD countries, reveals that:

- Manufacturing firms in the organised sector tend to be much below their efficient size, weighing significantly on productivity. Labour productivity is around 2% lower than it would be if employment was randomly allocated across firms.
- Some states are more successful in channelling resources to the most productive firms. Jharkhand, Orissa, Bihar, Madhya Pradesh and Delhi are among the best performers (Figure 2.14).
- Stringent barriers to entrepreneurship have a negative impact on allocative efficiency. Looking separately at the two main sub-components of this policy indicator reveals that regulatory and administrative opacity has a more negative impact on allocative efficiency than administrative burdens on start-ups.
- The degree of public control of manufacturing enterprises, which varies significantly across states, is not associated with differences in allocative efficiency.
- Reforming product market regulations (PMRs) would make it easier to create better quality jobs and boost income. Potential gains in allocative efficiency, and ultimately productivity, are sizeable. If all states were to lower barriers to entrepreneurship to the level observed in the best performing state (Karnataka), labour productivity in the organised manufacturing sector would increase by almost one half. The gains would be higher in those states where the manufacturing sector is tilted towards industries with a naturally high entry and exit rates and those with initially more stringent PMRs, including West Bengal, Chhattisgarh and Rajasthan.

Overall, the empirical analysis suggests that recent efforts to simplify regulations and improve the ease of doing business in the context of the *Make in India* initiative will have large positive impacts on productivity in the medium term. They should also help firms to create jobs in the organised sector. They should be pursued with vigour.

Figure 2.12. **Product market indicators and states' performance**



Note: Labour productivity is measured as value added per worker. FDI is measured as cumulative inflows over the period April 2000 to March 2014. PMR indicators shown here cover only two of the three sub-components of the OECD PMR. The sub-component Barriers to Trade and Investment is left out since most of these regulations are set at the national level and are thus similar across states.

Source: Central Statistics Office; OECD Public Sector, Taxation and Market Regulation database; OECD (2007); and Reserve Bank of India.

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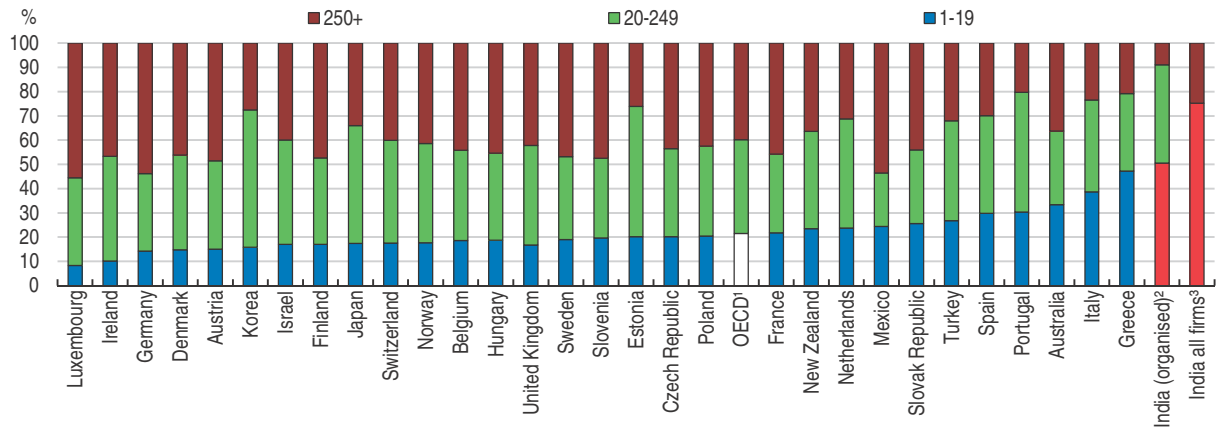
Figure 2.13. **Indian firms tend to be small**

Percentage of workers by firm size, 2014 or latest year available



Note: Total employment includes: i) paid employees; ii) employers and self-employed; iii) unpaid family workers.

1. Simple average.
2. For the organised sector in India, the thresholds are 1-19, 20-199 and 200+.
3. For India organised and unorganised sectors together, the thresholds are 1-19 and 20+.

Source: OECD Structural and Demographic Business Statistics database; and Annual Survey of Industries.

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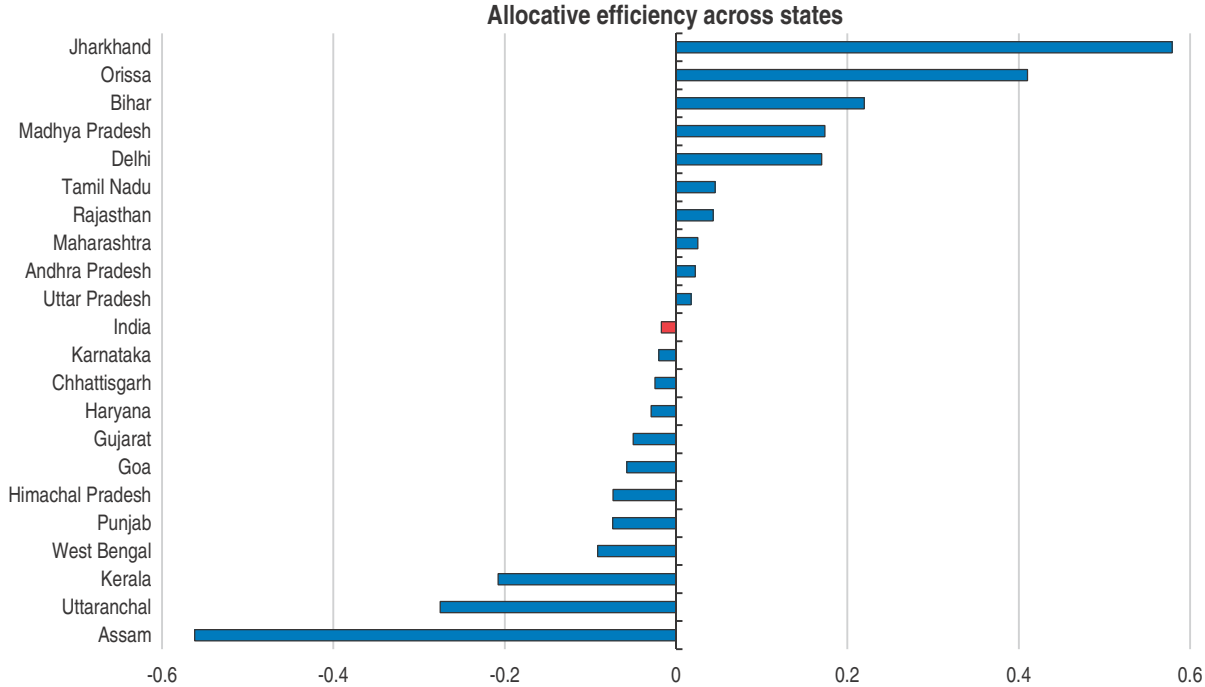
Figure 2.14. **Some states do better than others in allocating resources across firms from the organised sector**

Allocative efficiency across states



Note: Allocative efficiency indices are obtained as the within-industry covariance between firm size and firm labour productivity (see technical background paper). The state-level indexes are obtained by computing a weighted average of the state-industry indexes, using industry labour share as weights. Positive values indicate that the actual allocation of employment boosts labour productivity compared to the situation where employment is randomly allocated across firms.

Source: OECD calculation, Joumard et al. (forthcoming).

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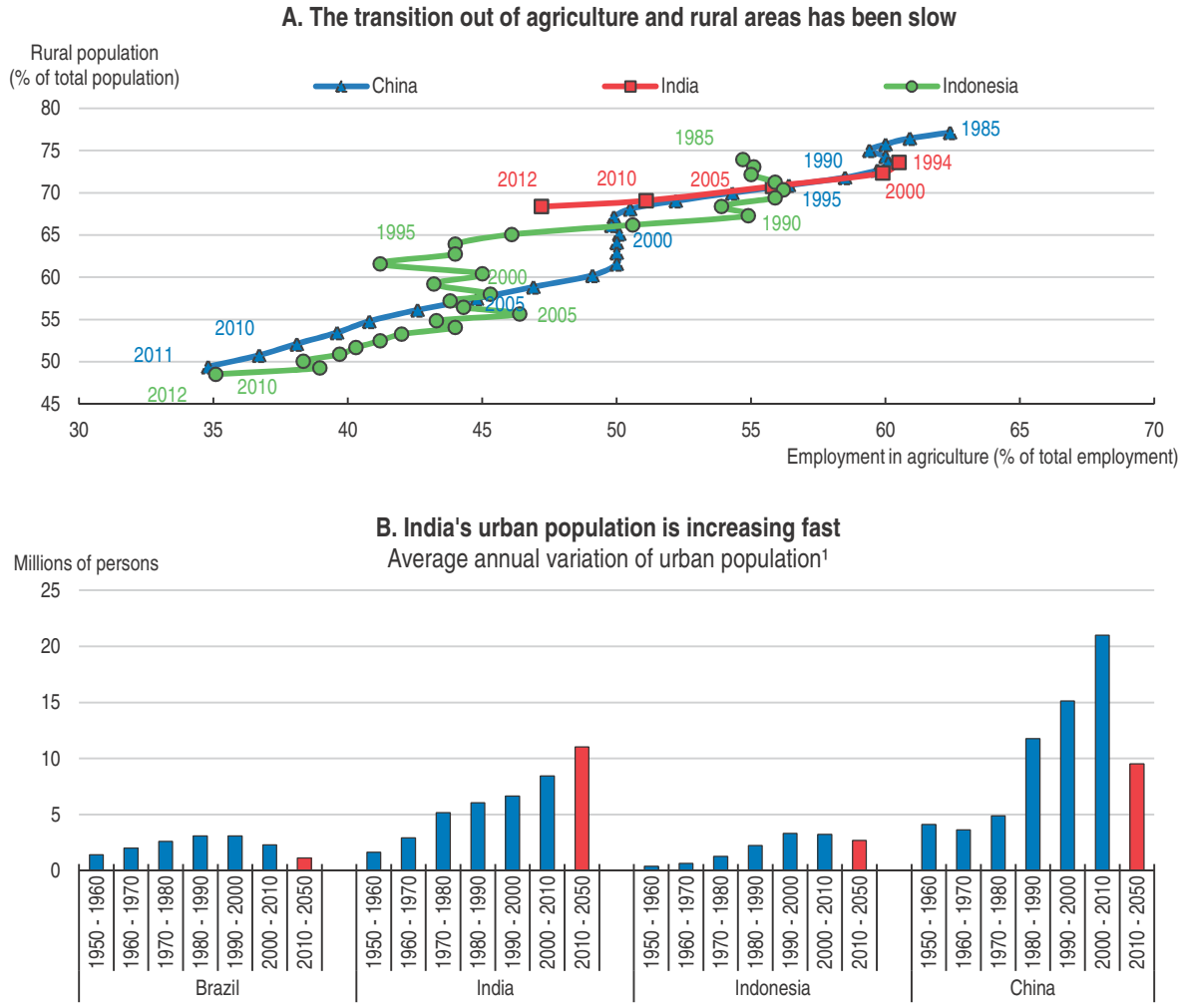
Making the most out of the urbanisation process

The urbanisation process will accelerate

The urban population has increased rapidly and this trend is set to accelerate. Migration from rural to urban areas has so far been relatively slow compared to China and Indonesia (Figure 2.15.A), partly reflecting limited job creation in cities, policies to support farmers' income and the rural public employment programme (Imbert and Papp, 2014; Ravi et al., 2012). The share of the rural population, at 69% of the total population according to the Census, remains very high by international standards. However, the number of workers engaged in non-agricultural activities who cross the rural-urban boundary everyday has increased rapidly (Sharma and Chandrasekhar, 2014). Rural/urban migration pressures are intensifying as the large gap in income and access to core public services between urban and rural areas acts as an important magnet: about half of the farmers are unhappy with their economic conditions and more than two thirds believe that life in cities would be better than in villages (CSDS, 2014). Coupled with population growth, this will make the increase in the urban population one of the fastest in the world in the coming decades (Figure 2.15.B).

Figure 2.15. **The urbanisation process will accelerate**



1. Forecasted data are shown in red.

Source: World Bank, for panel A; and United Nations, Department of Economic and Social Affairs, Population Division (2014), for panel B.

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Urbanisation can spur productivity and better respond to citizens' needs

International evidence suggests that urbanisation can boost economic growth, job creation and the well-being of residents. Metropolitan areas and dynamic medium-sized cities have enormous potential for job creation and innovation, as they are the hubs and gateways in global trade and transport networks (OECD, 2015b). In many OECD countries, labour productivity and wages increase with city size, even after controlling for worker attributes such as the education level (OECD, 2014b). This reflects agglomeration economies, i.e. the concentration of firms and workers in space which makes them more productive thanks to technological spillovers; better opportunities to share intermediate inputs; access to a larger number and wider variety of skilled workers; and access to a larger market which make it possible to exploit scale economies. Urban citizens and firms may also benefit from the availability of amenities and public goods that are only economically viable when provided on a large scale. Recent OECD studies suggest that for each doubling in population size, the productivity level of a city increases by 2% to 5%.

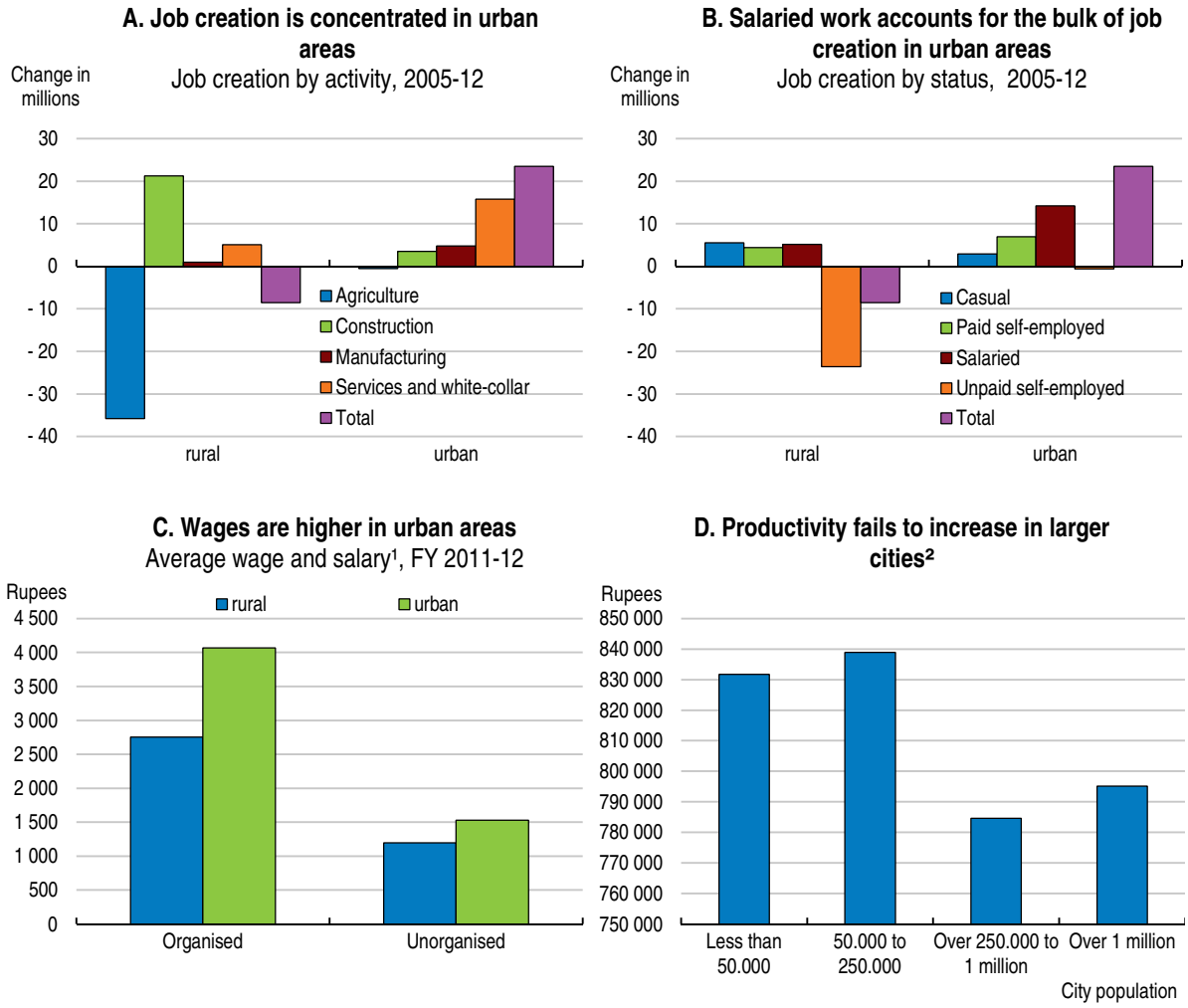
The potential productivity and well-being gains associated with urbanisation have not been fully exploited in India. Job creation has taken place in urban areas and most of the jobs created in cities are salaried jobs, often offering better conditions than self-employed and casual work (Figure 2.16.A&B). In contrast, rural areas have lost jobs, despite rising employment in the construction sector, likely reflecting the implementation of the rural employment programme (NREGS). Wages in the organised sector are also significantly higher in urban than in rural areas (Figure 2.16.C). However, a striking feature for India is that productivity declines with city size (Figure 2.16.D), suggesting that congestion costs quickly exceed agglomeration benefits. This partly reflects an urbanisation process dominated by urban sprawl more than by an increase in urban density, with new urban areas often lacking basic infrastructure and public services such as water provision and sanitation, water draining systems in case of floods, and public transport (World Bank, 2013).

Meeting infrastructure needs and addressing air pollution in urban areas

The extent to which cities realise their productivity potential and improve the quality of life of their residents largely depends on the quality of their physical and social infrastructure. Neither urban infrastructure nor the level of urban public services is adequate to cater for current needs, let alone to meet growing demands (Rao and Bird, 2010). Housing is a key issue, with 17% of urban households living in slums on average and up to 41% in Mumbai according to the latest Census. Differences across states are large: in Kerala less than 2% of urban households live in slums, compared with more than a third in Andhra Pradesh. Access to water provision and improved sanitation facilities in cities is also low compared with the other BRIICS countries (Figure 2.17.A). There is not a single city which supplies water 24 hours a day, which can be drunk straight from the tap without health concerns (Biswas and Tortajada, 2016). When available, public transportation is often slow and crowded while individuals with private vehicles are stuck in traffic jams.

Local air pollution has risen fast with urbanisation and, as measured by the level of fine particulates ($PM_{2.5}$), is now very high, with significant adverse health effects. Fine particulates create irreversible lung damages and increase the risk for urban citizens to suffer from stroke, heart disease, lung cancer and chronic and acute respiratory diseases, including asthma. Delhi was the most polluted city in the world in 2013 according to WHO data, with a yearly mean for $PM_{2.5}$ more than 15 times the WHO's air quality guideline. Since then, several measures have led to improvement in air quality. The Delhi government and

Figure 2.16. **Potential urbanisation gains are not fully exploited**



1. Calculated using total wage and salary earnings of all individuals who, during the reference period, worked as a regular wage or salaried employee.
2. Median value added per worker in the organised manufacturing sector.

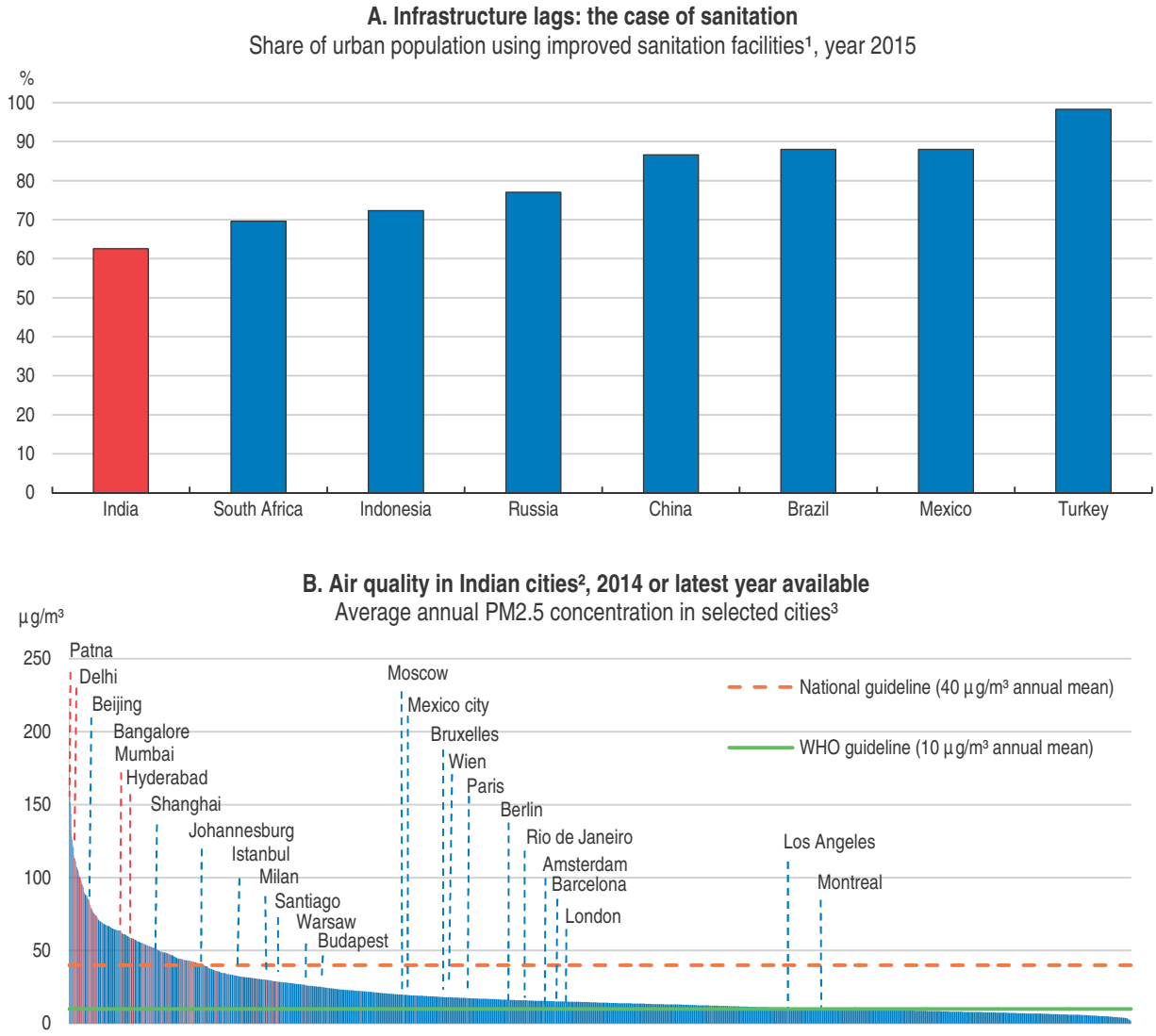
Source: NSSO, Employment and unemployment survey, rounds No. 61 and 68, for panel A and B; NSSO, Employment and unemployment survey, round No. 68, for panel C; World Bank Enterprise survey 2014, for panel D.

StatLink http://dx.doi.org/10.1787/888933453768

the Supreme Court directed restrictions in circulation for private vehicles in 2016, with odd and even registration numbers allowed on roads on alternate days. They have also doubled the entry tax of trucks into the city and banned pre-2005 trucks as well as 10-years old commercial vehicles powered by diesel to enter the city. They ordered to curb burning of waste in the city. Air pollution in Delhi was in 2016 lower than in 2014 and some smaller Indian cities surpassed Delhi on $PM_{2.5}$ (Gwalior, Allahabad, Patna and Raipur). Among the 20 most polluted cities in the word stand 10 Indian cities (Figure 2.17.B).

A national strategy is required to mitigate local air pollution. Prospects are worrying: urban transport activity (measured in passenger-km) in India is projected to grow by 623% between 2010 and 2050 (International Transport Forum, 2015). This would result in an increase by over 280% of both NOx and fine particulate ($PM_{2.5}$) emissions and an even larger increase in premature mortality from $PM_{2.5}$. To mitigate these risks, a national air quality strategy should

Figure 2.17. **Urbanisation challenges: infrastructure shortages and local air pollution**



1. An improved sanitation facility hygienically separates human excreta from human contact.
2. Indian cities are marked in red. The other selected cities are marked in blue.
3. PM2.5 refers to particulate matter less than 2.5 micrometers in diameter; these fine particles are particularly damaging to health as they can penetrate deep into the lungs when inhaled.

Source: World Health Organisation.

StatLink http://dx.doi.org/10.1787/888933453778

be implemented, combining: *i*) strong priority given to high-quality (reliable and rapid) public transport combined with land-use planning aimed at containing urban sprawl and air pollution – metro trains are being taken up in many cities; *ii*) targeted use of economic incentives such as tax on gasoline and diesel, road tolls and parking prices; *iii*) emission standards for vehicles to replace interim measures, such as banning the use of (highly polluting) three wheelers as already implemented in some Indian cities (e.g. Mumbai).

Upgrading urban infrastructure would require improving urban governance and increasing local governments' financial resources. The Constitution formally recognised local authorities in 1992. However, the sharing of responsibilities between states and local governments often remains unclear, with frequent overlaps. Some municipalities are

highly fragmented, with a superposition of wards, municipal corporations, towns, non-municipal urban areas and villages. Decision-making is often dysfunctional because it is split between elected and the career civil servants and neither can be held accountable (Morris, 2010). Reliable information on local government finances and quality of services is lacking (Report of the 14th Finance Commission). States can decide to abolish local taxes on immovable properties, and some did so (Rao and Bird, 2010). They can also reduce the rental value, which serves as the base for the recurrent tax on immovable property in most cases, or to introduce tax concessions.

Some Indian cities were among the pioneers of urban planning (Box 2.6). However, stringent land use regulations, including ceilings on floor area that is allowed to be built on an area of land, or very little planning at all in some cities, have resulted in urban sprawl (Glaeser, 2011; Morris, 2010). And long commuting distances are not matched by high quality public transport systems.

Enhancing urban governance would require better specifying what services municipalities should provide, given the size of its population and reducing fragmentation in decision-making. For metropolitan areas with highly fragmented municipal bodies, giving an organisation a clear focus on metropolitan issues and a broad mandate in terms of policy fields would help ensure that cities function well. This would improve the co-ordination between land use and transport planning. Removing ceilings on floor space indices, or at least raising them substantially, would also contribute to a better use of urban land. It is also vital to streamline the procedures involved in land acquisition and conversion, and to create the institutions needed for a well-functioning land market, particularly with respect to clear title and effective valuation processes. Political accountability could also be improved. In some cities, the mayoral term is short (less than five years) while in others the mayor is not directly elected. To effectively empower municipalities, training programmes for local government officials would help raise administrative capacity.

Local government revenues should be increased. The High Powered Expert Committee set up by the Ministry of Urban Development estimated that meeting urban infrastructure needs would require increasing spending from 0.7% of GDP in FY 2011-12 to 1.1% over the next 20 years (ICRIER, 2011). Since then, various flagship programmes have been launched (Box 2.7). Central government funding has increased and there is scope to attract more

Box 2.6. **India has pioneered urban planning: the city of Chandigarh**

The city of Chandigarh is the capital of the states of Punjab and Haryana. Its master plan was prepared in the early 1950s by Le Corbusier at the request of India's first Prime Minister Nehru. It is still famous for its architecture and urban design (Papillault, 2006) and was considered recently as the cleanest and richest city in India.

Le Corbusier identified four basic functions of a city – living, working, circulation and care of the body and spirit – which were implemented in Chandigarh (Krishnan, 2012). These remain very much aligned with current criteria to make cities an engine of growth and well-being– spatially compact, medium to high density, human centred, tightly linked by a mass transit system, with an emphasis on the provision of essential public services (including education and health care), public green areas, attractive public buildings, low pollution levels, safe walking infrastructure, accessibility to jobs and facilities for social and cultural interaction.

Box 2.7. **Recent initiatives to improve urban infrastructure in India**

The ***Atal Mission for Rejuvenation and Urban Transportation* (AMRUT)** launched in June 2015 aims at (i) ensuring that every household has access to a tap with assured supply of water and a sewerage connection; (ii) increasing the amenity value of cities by developing greenery and well-maintained open spaces (parks); and (iii) reducing pollution by switching to public transport or constructing facilities for non-motorised transport (e.g. walking and cycling). Central government funds amount to INR 500 billion (about 0.4% of 2015 GDP) spread over a five year period, to be complemented by state and local governments. It replaces the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) which spent INR 43 billion over a nine-year period. Few of the projects initiated under the JNNURM have, however, been completed (2012 Comptroller and Auditor General report), largely reflecting: i) delays in acquiring land; ii) deficiencies in preparing projects; iii) non-identification of beneficiaries which increased the risk of ineligible beneficiaries getting the benefits. Large differences in completion rates were observed across states, with Gujarat faring best at 55%. Compared with the JNNURM, the AMRUT provides states with more flexibility in the use of the grants allocated to them, which should speed up project implementation.

In parallel, the government launched in 2015 a programme to develop ***100 Smart cities***, to be selected through an open and transparent competition process. Each state shortlisted its smart city aspirants in line with scoring criteria and submitted proposals to the central government for evaluation and financial support. A majority of states have included their capitals in the list – 21 entries are for state capitals or for parts within state capitals. A list of 98 potential smart cities was released in August 2015. Out of the 100 cities, 60 were selected in January 2017 covering 72 million residents, including parts of Delhi, Chennai and Ahmedabad. Each smart city will receive central government assistance. The central government has approved a sum of INR 480 billion (0.4 % of 2015 GDP) for the project in the next five years to be supplemented by state governments, urban local bodies and the private sector.

In June 2015, the government launched the ***Housing for all programme***. It aims at providing housing for all urban poor by 2022. The estimated costs amount to INR 12-13 trillion (about 9% of 2015 GDP), of which 3 trillion to be funded by the central government. The scheme will mainly focus on the rehabilitation of slums and the provision of affordable housing to low-income poor through subsidised loans.

Clean India (Swachh Bharat) is a national campaign to eliminate open defecation by 2019 by constructing toilets and to improve solid waste management in cities. A total investment need of INR 620 billion (0.5% of FY 2015 GDP) is envisaged up to 2019, of which a fourth to be borne by the central government and the rest by states, urban local bodies and the private sector. To finance the campaign, the government introduced a 0.5% earmarked tax on services. A *Cleanliness index* ranking cities' performance was released.

Municipal Bonds – The central government provides support to Urban Local Bodies to issue municipal bonds for investment in urban infrastructure under its flagship missions such as Smart Cities Mission (SCM).

private financing. Still, this falls short of the estimated needs, calling for substantial financial participation by the state and local governments. The fiscal federalism literature (Joumard and Kongsrud, 2003; Ahmad *et al.*, 2014) suggests that the tax on immovable property and user charges are the most appropriate financial resources for local governments. In India, revenue from these two sources is relatively low (Chapter 1, Rao and Bird, 2010; Rao, 2013).

Raising more property tax revenue would require improving clarity in property ownership, up-to-date valuation of properties and more autonomy in setting the base and rates and to enforce the tax. Some cities in India (e.g. Bangalore) and in other emerging countries (Bogota and Baranquilla in Colombia) have introduced a self-assessment system which could be replicated. Property values should also be up-dated frequently. In the absence of relevant information on actual market values, house price, construction price or consumption price indices could be used as an auxiliary measure to up-rate properties in-between re-evaluations (OECD, 2015c).

User charges for urban infrastructure should be raised, especially for those services with a characteristic of "private goods", although this should be accompanied with a commitment to improve the quality of services. User charges in most cities are currently set well below operation and maintenance costs, in particular for power and water provision (Pratap, 2015). Relying more on parking fees and road pricing would entail a double dividend, i.e. raising more revenue and reducing private car usage and thus pollution. For core public services, however, some mechanisms would need to be introduced to protect the most vulnerable households (e.g. guaranteeing a reduced price for consumption below a threshold). Municipal bonds for PPP projects in urban local bodies including for services with user charges are envisaged in at least three major cities.

Recommendations for achieving strong and balanced regional development

Key recommendations

- Support farm consolidation to exploit economies of scale and to promote mechanisation by improving clarity of land titles. Digitisation of land rights would further allow better access to credit to fund investment.
- Remove subsidies for fertilisers, electricity and water used by farmers and replace them by a direct income support scheme. Better aligning the price of inputs (e.g. fertilisers, electricity and water) with their true social costs, including pollution and scarcity, would promote a more sustainable use of natural resources.
- Improve the ease of doing business at the central and state level further by continuing the benchmarking of states and by strengthening the sharing of best practices across states.
- Implement a national air quality strategy combining: i) strong priority given to quality public transport; ii) targeted use of economic incentives such as tax on gasoline and diesel, road tolls and parking prices; iii) emission standards for vehicles.
- Promote better urban infrastructure by empowering metropolitan bodies, making them accountable, giving them and municipal governments more revenue-raising powers and strengthening administrative capacity.
- Continue efforts to improve access to core public services for all.

Other recommendations

Boosting productivity in the agriculture sector

- Pursue efforts to deregulate and unify markets for agricultural products to support farmers' income.
- Invest more in rural infrastructure, such as roads connecting villages to market towns, crop storage infrastructure and access to sustainable irrigation technologies such as drip irrigation.

Recommendations for achieving strong and balanced regional development *(cont.)*

Boosting productivity in the manufacturing sector

- Simplify the bureaucratic procedures of securing regulatory approvals and environmental clearance for infrastructure projects. Define timelines for all stages of granting approvals and rely more on single window clearance mechanisms. Review the timelines within the Land Acquisition Bill to make land acquisition faster.

Making the most out of urbanisation

- Enable local governments to raise more taxes on immovable properties by helping them to assess and up-date the value of properties and by giving them more autonomy to set the base, rate and enforce taxes on immovable properties.
- Raise user charges for urban infrastructure while committing to better services, and securing access of the poor to public services.
- For metropolitan areas with highly fragmented municipal bodies, create an organisation with a clear focus on metropolitan issues to promote better co-ordination between land use, transport planning and other key public services.
- Rely more on road pricing and parking fees to increase municipal revenue, restrain private car usage and reduce pollution.

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ANNEX A

Spatial inequalities: across states or between rural and urban areas?

Income inequality can be decomposed along at least in three dimensions:

- **Between states,** as gaps in the average income among states;
- **Urban/rural divide,** as gaps in the average income between rural and urban households in the same state;
- **Within component:** as differences across households living in the same state and belonging to the same rural/urban group.

While the Gini or the Theil coefficients are the most frequently inequality measures used, they do not allow the decomposition of total inequality into more than two components. Hence other measures have to be used to break down inequality between the two spatial sub-groups of the population – here states; and urban and rural areas – and the "within" component (i.e. within states, within urban areas and within rural areas). The mean logarithmic deviation (MLD) and the squared coefficient of variation (SCV) have attractive properties. (For more discussion on the properties of the inequality indices, see Mookherjee and Shorrocks, 1982). Notably, these two indices allow decomposing inequality into more dimensions.

The mean logarithmic deviation can be used as follows:

$$MLD = \frac{1}{N}\sum_{i=1}^{N}(\ln \bar{x} - \ln x_i)$$

$$= \underbrace{\frac{1}{N}\sum_{i=1}^{N}\left(\ln \bar{x} - \ln \bar{x}_{S_i}\right)}_{Between\ states} + \underbrace{\frac{1}{N}\sum_{i=1}^{N}\left(\ln \bar{x}_{S_i} - \ln \bar{x}_{R_{S_i}}\right)}_{Urban/rural\ divide} + \underbrace{\frac{1}{N}\sum_{i=1}^{N}\left(\ln \bar{x}_{R_{S_i}} - \ln x_i\right)}_{Within\ component}$$

While, for the squared coefficient of variation, we have:

$$SCV = \frac{1}{N}\frac{\sum_{i=1}^{N}(x_i - \bar{x})^2}{\bar{x}^2} = \underbrace{\frac{1}{N}\frac{\sum_{i=1}^{N}\left(\bar{x}_{S_i} - \bar{x}\right)^2}{\bar{x}^2}}_{Between\ states} + \underbrace{\frac{1}{N}\frac{\sum_{i=1}^{N}\left(\bar{x}_{R_{S_i}} - \bar{x}_{S_i}\right)^2}{\bar{x}^2}}_{Urban/rural\ divide} + \underbrace{\frac{1}{N}\frac{\sum_{i=1}^{N}\left(x_i - \bar{x}_{R_{S_i}}\right)^2}{\bar{x}^2}}_{Within\ component}$$

Where:

- x_i is the income of household i;
- $\bar{x}_{S_i}$ is the average income of the state S to which household i belongs to;
- $\bar{x}_{R_{S_i}}$ is the average urban or rural income, depending on whether the household lives in a rural or a urban area, in the state S to which household i belongs to;
- $\bar{x}$ is India's household average income.

Micro data for individual or household income are not available in India. Hence, the analysis is carried out with data on household consumption. This can introduce a downward bias in the measure of inequality as higher income households tend to consume a smaller part of their income. This can affect the overall inequality index as well as the three sub-components and in particular the urban/rural divide component as urban incomes are on average higher than rural ones. On the other hand, rural households may receive part of their pay in nature or self-produce part of the goods they consume. If this consumption is not captured by the survey, the urban/rural divide is overestimated.

Table A.1. **Percentage of inequality explained by disparities across states and the urban/rural divide**

	Between states	Urban/rural divide	Within component
		Mean logarithmic deviation (MLD)	
2004	14.75	17.58	67.61
2012	18.85	16.46	64.79
		Squared coefficient of variation (SCV)	
2004	7.75	10.00	82.17
2012	9.01	9.30	81.76

Source: Authors' calculation.

The main conclusions from this analysis are as follows:

- The most important source of income inequality is the "within component". Using various indicators of income inequality, Subramanian and Jayaraj (2015) suggest that it has increased steadily within urban areas since the early 1980s while there is less of a clear cut trend in rural areas;
- The "urban/rural divide" contributed more to spatial inequality than the "between states" component in 2004. However, the contribution of the "between states" dimension to overall inequality has increased;

The two approaches differ as to the contribution of spatial inequality – either the "between states" or the "rural/urban divide" – to total inequality. This is mostly due to the sensitivity of the two indicators to different forms of inequalities, with the SCV being more influenced by the presence of extremely high or to extremely low values than the MLD.

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India is the fastest-growing G20 economy, thanks to ambitious structural reforms and low commodity prices. Deregulation and improvement in the ease of doing business have boosted foreign investment. However, investment is still held back by the relatively high corporate income tax rates, slow land acquisition processes, stringent regulations, weak corporate balance sheets, high non-performing loans and infrastructure bottlenecks. Quality job creation has been low, due to complex labour laws. A comprehensive tax reform would promote inclusive growth: implementation of the Goods and Services Tax would support competitiveness, investment and economic growth as will reducing the corporate income tax rate and broadening the base. Property and personal income taxes could be reformed to raise more revenue, promote social justice and empower sub-national governments. Ensuring clarity and certainty in tax legislation and employing more skilled tax officers would strengthen the tax administration. Spatial disparities in living standards are large. India is reforming relations across levels of government to empower the states and make policies more responsive to local conditions. Some states have taken the lead in improving the ease of doing business and now enjoy higher productivity and income. In rural areas, poverty rates are high and access to core public services is often poor. Farm productivity is low owing to small and fragmented land holdings, poor input management, and inefficient market conditions. In urban areas, agglomeration benefits are quickly reduced by congestion costs, in particular air pollution and long commuting time.

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