THE IMPORTANCE OF HUMAN AND SOCIAL CAPITAL FOR ECONOMIC GROWTH AND SUSTAINABLE DEVELOPMENT

(Note by the Secretariat)
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1. The Centre for Educational Research and Innovation is preparing a report relating to the role of human and social capital in economic growth and sustainable development. This follows a symposium on the topic held jointly with Human Resources Development Canada in March 2000. The work is designed to contribute to the final reports of the OECD projects on economic growth and sustainable development which will be submitted to the OECD Ministerial Council meeting in May 2001. The report will also be used to prepare the discussions of the OECD Education Ministers when they meet in April 2001.

2. The Secretariat is currently producing a first draft of a report, which will be considered by the CERI Governing Board and the Education Committee at their meetings in November 2000. As it was not possible to provide a complete draft in time for the meeting of ELSAC on 18-20 October, it was decided to provide delegates with a summary of the report as well as an annotated table of contents indicating the structure and main themes of the report.

3. The Committee is invited to COMMENT on the Introduction to the report, and ADVISE on areas of work that could be developed, with a focus on current policy interests.
Knowledge and social networks may provide important clues to differences in economic performance…

1. Much research effort has been expended in recent years to understand better the factors influencing long-term trends in economic growth. Traditional explanations, which have centred on the roles of physical, human and natural capital, do not seem to account adequately for significant divergences in GDP growth. In particular, the critical role of knowledge and learning does not appear to be adequately represented in these explanations. The search for new explanations is, in part, prompted by the recent literature on so-called “new growth” or endogenous growth models and by attempts to establish links between “new economy” and knowledge networks. A shift appears to have taken place through enhanced use of knowledge inputs, rising skill requirements, and the importance of a greater ability to adapt to change. Innovation networks may facilitate the search for new information and innovation across diverse domains. Strong internal and external ties and networks may facilitate the management and communication of complex or tacit knowledge within units or firms.

Many factors other than human and social capital are pertinent…

2. There are many factors involved in economic and social progress beside human and social capital. The basic premise of this report is not that investing in learning or social networks and engagement will automatically lead to higher economic growth and well-being. Rather, investing in individual skills and communities are important elements in any overall strategy to improve economic performance and well-being over time. The scale and timing of the impact of such investments depend on a number of important inter-related conditions, as well as on the quality and distribution of human and social capital at different points in time and in different cultural settings. In short, there is no quick socio-economic fix merely through investment in education or in community networks.

The reasons for a new report on the role of human capital…

3. The report begins where the OECD report Human Capital Investment - an International Comparison (OECD, 1998) finished. It opens up new lines of inquiry into the impact of human capital on society and the economy and situates its role in a broader social context. Many different approaches and emphases can be adopted in defining and measuring both human and social capital. The working definitions suggested here are:

- **Human capital** refers to the knowledge, skills, competencies and attributes embodied in individuals which facilitate the creation of personal, social and economic well-being.

- **Social capital** refers to the shared norms, beliefs, values and networks embedded in institutions, organisations and communities which facilitate co-operation within or between different groups.

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1 For example, levels of initial education, which are frequently used in economic growth models as a proxy for human capital, capture only some aspects of human capital.
Key questions posed in this report...

4. The aim of this report is to provide senior policy-makers and analysts with a guide to the issues, policy trade-offs and challenges in investing in high-quality human and social capital to achieve balanced economic growth and social development. The report focuses on four key questions:

   - How have human and social capital impacted on economic growth in recent decades?
   - Are there risks of growing inequalities in access to learning and social networks for different groups?
   - What are the economic and social implications for future generations of the bequest of human and social capital from present generations?
   - What are the policy implications raised by the above three considerations?

The report brings together evidence to assess the impact of human and social capital....

5. The report attempts to bring together facts and analysis from different sources to underline the importance of investing in human and social capital as part of larger development strategies appropriate to the circumstances of each country or region. The evidence relating to human capital draws on four decades of empirical work. Recent evidence for the impact of education on economic growth has been mixed, but there are indications that this reflects the poor quality of available proxy measures of human capital rather than casting doubt on the message that knowledge and skills are among the key determinants of economic growth and well-being. This points to the need for better measures of the role of knowledge and skills, which go beyond measures of initial education. Also, both the impact and determination of learning and knowledge is mediated through various social networks and norms, the analysis of which may add considerably to the understanding of the role of human capital.

The conceptualisation and measurement of social capital is less advanced but new lines of inquiry have recently opened up ...

6. The conceptualisation and measurement of social capital is relatively new and is still subject to a certain degree of uncertainty and controversy reminiscent of that which arose during the development of the concept and measurement of human capital. It is less easy to draw firm conclusions in relation to the impact of social capital. However, as the report will indicate, there is a growing body of evidence which suggests that social capital:

   - has an impact on areas such as health, personal well-being and social cohesion; and,
   - may be complementary with human capital and other factors in increasing the effectiveness of physical capital investment, institutions etc., the impact of which is difficult to isolate; and consequently,
   - the examination of its role is worth pursuing.

The need for coherence in economic and social policy....
7. The report addresses a broad set of questions and issues relating not only to the factors influencing economic growth, but also to how learning, networks and civic traditions contribute to social well-being more generally. Three crucial aspects emphasised in this report are:

− the difficulties posed by protracted and uncertain time horizons in considering the impact of current trends and policies on future social and economic outcomes;

− the importance of coherence and balance in the roles of different actors and policy instruments in achieving agreed goals; and

− the importance of different institutional, cultural and policy models across OECD countries in arriving at balanced economic and social development.

8. Human and social capital, together with other factors that contribute to well-being, are potentially complementary and mutually reinforcing. For example, human capital investment can help to generate norms and networks. On the other hand, strong social ties in families and communities can enhance the effectiveness of schools and learning processes. Together, human and social capital can leverage improvements in the performance of institutions and firms as well as various other forms of capital. The generation and effective use of knowledge and skills may depend on the right “social glue” - in families, local communities, schools, workplaces and all the other institutions that determine what makes some regions and nations more successful than others in achieving various economic and social goals.

9. Equitable solutions to economic and social challenges are those which include rather than exclude various groups and interests in civil society. A key challenge for policy-makers is how to cope with increasing diversity, heterogeneity as well as inequality in income and economic wealth in ways that preserve social cohesion and perceived fairness of outcomes for all groups. Trade-offs and challenges are inevitable, not just with regard to public responses to current needs and concerns, but also management of current resources to meet future social and economic needs. It is necessary to protect and renew the social environment as well as the natural environment. If too many people feel excluded from the fruits of economic growth or the benefits of learning, there is a risk of eroding social cohesion as well as the conditions for sustainable social and economic development. How opportunities for access to learning and social networks are distributed across the population together with the quality and potential of this access are key concerns.

Plan of the Report

10. Chapter 1 outlines the key concerns, trends, concepts and relationships discussed in the report as well as the main questions to be addressed. Chapter 2 considers the definition and measurement of human capital defined broadly to include all types of skills and attributes embodied in individuals relevant to well-being. The sources of human capital in families, schools, communities and workplaces are discussed, especially in relation to the distribution of learning opportunities and outcomes across different groups. The chapter also assesses the empirical evidence for the impact of human capital on the economy and society. There is a need to arrive at a clearer understanding, not only of various concepts, but also of the main linkages between the learning environment and economic and social development. Chapter 3 addresses the conceptual and measurement framework for social capital, examining its sources and impacts on a broad range of possible outcomes. The potential for
complementarity between human and social capital, both from a conceptual and empirical standpoint, is discussed. Chapter 4 considers some basic questions about the implications for public policy of the preceding analyses of human and social capital. A key consideration is that many actors are involved, including civil society and the business or private sector, in promoting and harnessing high-quality investments in communities and people. Based on the knowledge gaps identified in the preceding chapters, Chapter 4 concludes by outlining a number of areas where further research and analysis is required at the international level in the light of the policy questions raised.

Reference

CHAPTER 1 Emerging social and economic concerns

1.1 What are governments and societies concerned about?

Governments and societies are concerned about a wider range of issues than just maximisation of growth in GDP. Social inclusion, child poverty, health and the digital divide are just some of the key issues concerning policy makers. However, partnership between different actors can use economic growth to improve social well-being.

1.2 What is happening in some of these key areas of concern?

Drawing on the OECD social indicators project as well as other sources, some examples are given of varying trends in economic performance and social and labour market phenomena.

1.3 Getting the balance right - reconciling new economies and new societies

Meeting a variety of social goals at the national level calls for new and imaginative partnerships between public, private and voluntary sectors. The need for inclusion and balance between different objectives is indicated.

1.4 Towards a framework for understanding some key inter-relationships

A clear conceptual framework is needed. Human and social capital are part of a wider range of human and social capabilities which include the roles of institutions and social arrangements. Together with physical and natural capital, these impact on social well-being. Clear distinctions need to be drawn between economic and social well-being (which includes economic well-being), and between growth in GDP and economic well-being (the latter includes economic activities not counted in GDP as well as the effect of changing income distribution). GDP also includes the value of activities that do not contribute directly to economic well-being but represent outlays corresponding to “social regrettables”.

1.5 Is well-being sustainable? - the importance of time as a dimension

If current investments in human and social capital play an important role in determining social well-being in the current as well as in future periods, concerns about the quality and distribution of skills and access to social networks must be given due weight in any assessment of the future sustainability of well-being.
1.6 Conclusions and some questions to guide the remainder of this report

What is the empirical evidence that human and social capital contribute to various aspects of well-being? Is there evidence that skills and competencies are not matching future social and labour market needs? Is there evidence that social capital is declining in recent decades for a number of OECD countries? Are the distributions of human and social capital changing in ways that undermine social inclusion? How can more human and social capital be created and how can the quality of these be improved?

CHAPTER 2: The evidence on human capital

2.1 Introduction

Changing social conditions and labour markets have, in recent years, brought the issues of competence and skills to the forefront. The broad “social returns” to learning in the form of enhanced personal well-being and greater social cohesion are viewed by many policy analysts as being at least as important as the impact on labour market earnings and macro-economic growth.

2.2 What do we mean by human capital?

Although a variety of definitions of human capital are possible, the definition used in this report is: “Te knowledge, skills, competencies and attributes embodied in individuals which facilitate the creation of personal, social and economic well-being” Under the heading of attributes may be included aspects of motivation, behaviour as well as physical, emotional and mental health. A broader notion of human capital, which incorporates various attributes and characteristics of individuals, may be justified on the grounds that these contribute to well-being and can be influenced and changed by the external environment including learning.

2.3 How do we measure human capital?

Aggregate or single-index measures of human capital based on simple aggregation from individual units such as average years of schooling, highest completed level of education or similar measures need to be complemented with more specific measures based on direct measurement or observation of skills and competencies at the local, organisational or community level.

2.4 How is human capital distributed among various groups?

Societies and communities that tend to be less equal in terms of access to education and learning outcomes tend to be less equal in terms of economic and social opportunities. For example, countries with less variation in levels of adult literacy tend to perform better at the aggregate level in international comparisons of literacy.
2.5 The changing demand for human capital

Changes in technology coupled with the emergence of sectors and forms of economic activity that are more “knowledge intensive” are driving up the demand for knowledge, skills, flexibility and adaptability, not just in individuals but also in organisations and firms. More intensive demand for “social knowledge” at the level of organisations and firms implies a demand for not only more skilled individuals, but also for more effective management practices and for sharing of knowledge, team-working and flexibility. The downside of this is that in the new economy, workers with low skills and education may be increasingly exposed to risks of unemployment and social exclusion.

2.6 How is human capital developed?

The focus of this section draws on a large literature concerning school effectiveness and productivity to examine how student learning outcomes are affected by various "inputs" including teaching resources, family and home background as well as school climate. Much depends on how the various actors including students, parents, teachers and those in the wider school community interact and make use of resources. The results suggest that stronger partnerships between students, parents and teachers supported by appropriate institutional and funding arrangements are vital, and that increased spending alone is not enough.

2.7 What is the impact of human capital on economic well-being?

The evidence for an association between education and higher life-time income is well established. The macro-level impact of education and learning outside schools is more difficult to establish. However, a review of the literature on the influences of economic growth accords a significant role to education, learning and innovation. A key consideration appears to be the interaction between human capital and other factors in producing higher levels of economic growth.

2.8 What is the impact of human capital on other aspects of human well-being?

A large and growing body of empirical evidence shows that education is associated with improved levels of health and personal well-being as well as higher rates of social and civic engagement. However, care is needed in examining the role of various factors which are highly inter-dependent. Some of the impact of education may be picking up the influence of varying levels of social capital as well as innate or socio-economic factors correlated with education.

2.9 Conclusions of this chapter

The broad "social" returns to learning are of key importance along with the direct returns in terms of labour market earnings or enhanced economic growth. In so far as impacts can be measured and compared, the broad social impacts of learning (manifested in terms of the correlations between educational attainment and health, crime and social cohesion) can be as large as the impacts on economic productivity. However, the effects of education and learning are likely to be uneven. Strategies for investing in education, training and know-how need to be highly discerning if the desired impact on economic and social development is to
be realised. Understanding the national, regional and institutional contexts in which human capital investment takes place is vital. An important conclusion of the examination of school effectiveness is that there appear to be higher returns to investment in wider participation and avoidance of early school drop-out coupled with high quality teaching practice, than to general increases in funding per student or generalised reductions in class size. The role of family and community support networks in fostering a culture of learning remains as a potentially important factor, even if there is evidence that it may have weakened over time.

CHAPTER 3: The evidence on social capital

3.1 Introduction

Social capital can provide a useful framework in which to examine a number of policy issues which cross various departments and domains. Understandings and usage of the concept vary. However, there is a growing intuition among economists, sociologists and political scientists, backed by some recent empirical evidence, that the concept and measurement of social capital is worth investigating further and that it may hold important clues to understanding the production of economic and social well-being and the role of human capital therein.

3.2 What do we mean by social capital?

Social capital, which refers to aspects of social life - the existence of networks, norms and relationships - conditions the ways in which people act together, create synergies, and build partnerships. Social capital is the glue that holds together communities, organisations, firms and different social and ethnic groups. Many different approaches and emphases can be adopted in defining and measuring social capital. The working definition suggested here is: “The shared norms, beliefs, values and networks embedded in institutions, organisations and communities which facilitate co-operation within or between different groups”. Social capital resides in relationships embedded in institutions, organisations and communities and is different from human capital which is embodied in individuals.

3.3 How do we measure social capital?

Even more so than is the case with human capital, the measurement of social capital is problematic. In the rush to measure, there may be a risk of confusing sources, functions and outcomes. Typically, the most popular proxy measures for social capital to date centre around two aspects: (i) levels of inter-personal trust; and (ii) levels of engagement in social or group activities. Care is needed in deriving aggregate, national or regional level measures of social capital since norms and networks are applied in very specific contexts and group circumstances and an aggregate index measure may not capture many essential qualities and dimensions of social capital.
3.4 How is social capital distributed among various groups?

As with human capital, access to social networks varies according to social, ethnic or gender status. The ‘quality’ of the social relations that an individual can ‘spend’ on the labour market, may be as important, if not more so, than the ‘quantity’ of his/her relations or some other formal, descriptive, measure of the network extensiveness.

3.5 How is social capital produced?

Social capital is the product of many factors including cumulative civic traditions, cultural norms and attitudes embodied in particular societies in a given period as well as the impact of education and lifelong learning. Social capital takes time, probably generations, to accumulate. However, it may be eroded relatively quickly under certain conditions of economic insecurity, social exclusion or changing patterns of values and norms of behaviour. Not all forms of social capital are necessarily productive of positive social or economic outcomes. High-trust cartels and gangs may lead to social and economic dysfunction.

3.6 What is the impact of social capital on economic well-being?

Evidence is reviewed in relation to (1) productivity differences across organisations and companies; (2) macro-economic growth differences; and (3) differences in income inequality and wealth. The evidence suggests that norms of trust and strong networks within and between firms and other economic agents can lower transaction costs and stimulate economic performance. The evidence at the macro-economic level is more difficult to pin down. Some positive correlations with patterns of saving and investment are found. In general, high social capital societies tend to be more equal in relation to the distribution of income and learning outcomes. However, the direction of causality is not clear.

3.7 What is the impact of social capital on other aspects of human well-being?

Possibly the clearest empirical evidence for the potentially positive impact of social capital is through its impact on the quality of life of individuals including their health and personal well-being. Individuals who have active and trusting connections to others tend to act for the benefit of the rest of society as well as draw various benefits themselves.

3.8 Conclusions of this chapter

The evidence on the impact of social capital is relatively recent. Two key conclusions of this chapter are: (i) there is a very close relationship between social capital and human capital (between, for example, levels of civic engagement and trust on the one hand and levels of education on the other); (ii) the evidence on the health and personal well-being impacts is relatively strong. These impacts may be relevant to economic outcomes in the long-run.
CHAPTER 4: Some policy questions and further research needs

4.1 Introduction

Very specific recommendations in either area - human or social capital - do not seem appropriate at the international level given the huge variation in cultural traditions and social objectives across OECD countries. However, a number of general questions can be raised, especially in relation to how public policy may influence long-term trends in social capital through its support for more effective learning and social inclusion. The voluntary and private sectors have an important role to play.

4.2 How can public authorities promote more effective investment in human capital?

A policy to promote a learning society calls for co-ordination of different policy instruments involving not only education interests, but social protection, labour markets, fiscal policy and the role of different private actors. Some specific questions are raised in relation to the goals and organisation of formal education as well as the use and compensation of skills and competencies in the labour market.

4.3 How can public authorities promote more effective investment in social capital?

Education may offer one “policy lever” for governments to influence long-term trends in social capital. There may be scope for greater flexibility in working hours and the use of public facilities and planning of residential and transport arrangements to provide incentives for greater social connectedness. Social policy may need to identify more effective ways of supporting families in need and achieving a better balance between competing social objectives. The quality of care and learning for young children may be one area of critical importance, especially in relation to laying the foundations for lifelong learning and optimum participation in society.

4.4 Conclusion

The challenge for policy-makers is to find the most effective ways in which both human capital and social capital can be fostered to meet future social needs. Balancing between present and future social needs, and between economic growth and other social objectives, will continue to require participation and consensus by key players in putting in place the right conditions for change and sustained progress.

Appendix A Some partial measures of economic and social well-being

This section reviews a number of attempts at the international level to measure aspects of economic and social well-being. Various indices have been developed to capture changes in the natural, physical and social environments. The results suggest that trends in some aspects of economic and social well-being may be at variance with trends in GDP. However, important methodological and measurement problems arise in making these comparisons.
Appendix B  *Tracing the concepts of human and social capital and their relationship to other forms of capital*

This section reviews the origin as well as the applicability of several concepts such as human, social and organisational capital.

Appendix C  *A review of the empirical evidence for the impact of education on economic growth*

This section reviews the evidence for the impact of education on growth in GDP using a variety of different approaches. The evidence is mixed but suggests that education is positively related to growth in GDP in OECD countries. However, a number of important conditions and complementary actions are required to make the best use of knowledge and skills.

Appendix D  *Is there evidence that levels of trust and civic engagement have eroded recently in some OECD countries?*

This section explores evidence of a decline in trust and civic engagement for several OECD countries including the United States, the United Kingdom, the Netherlands, Australia, Japan and Germany. Beneath the apparent stability of organisational membership in most of the countries reviewed other than the USA, there may have been an erosion in the quality of collective engagement, especially in the degree of interpersonal trust and trust towards political institutions. The evidence raises concerns about inter-group differences in access to social networks and levels of trust which have appeared to grow in time for some countries.

Appendix E  *Knowledge gaps and possible future areas of research*

In the light of the policy questions raised in chapter 4, as well as the knowledge gaps identified in chapters 2 and 3, this annex outlines a number of areas in which further research and analysis is required at the international level. A better understanding of the inter-relationship between human and social capital and their links to wider social and economic outcomes is desirable. It is necessary to not only compare countries, but to identify “what works” in particular cases. Public policy needs to achieve a better understanding of why and how different responses work in relation to achieving important societal goals.