### Chapter 4

### What does this mean for policy?

How can policy-makers address the Productivity-Inclusiveness Nexus? What is the best way to promote synergies between faster productivity growth and greater inclusiveness? How can compensatory measures be employed to deal with trade-offs? This chapter sets out the beginnings of a policy framework to address the multiple interactions between inequalities and productivity and how these interactions play out across countries, regions, firms and between individuals. The overarching aim of the chapter is to provide guidance for policymakers on how to ensure that all individuals, firms and regions are empowered to both contribute to and benefit from improved productivity growth. It begins by examining how policy can support individuals as they strive to fulfil their productive potential, before looking at how policy can help all firms to become more productive whilst also promoting inclusive growth. It then goes on to consider how changes to policy-making at the local and regional levels can make a difference, before finally exploring the need for strong public governance, including a whole-of-government approach to avoid piecemeal policymaking and unintended consequences.

To deal with the challenges posed by declining productivity growth, widening inequalities and large disparities in well-being outcomes, policy makers need to adopt a broader, more inclusive, approach to productivity growth. Addressing the trends in slowing productivity growth and rising inequalities (outlined in chapters one and two), whilst accounting for the complexity of the potential linkages between the two trends (as discussed in chapter three) and the impact of evolving policy settings, will necessitate the adoption of a new more systemic approach to policy making. Adopting such an approach, centred on the unifying objectives of reducing inequalities and promoting productivity growth, will better enable policy makers to deploy coherent policy sets covering a range of areas: from product market regulation, to innovation and competition, to labour market regulation, skills, and finance. It will also ensure that policy levers are, ex-ante, coherently aligned to harness self-reinforcing, synergies between policy domains, whilst providing a clear indication, ex-post, of how compensatory measures can best be enacted when trade-offs occur.

Further work is needed to spell out the full implications of the nexus for policy making, but in many instances it is already clear how policies can be aligned to promote both inclusiveness and improved productivity growth. Ultimately, when it comes to navigating the Productivity-Inclusiveness Nexus, further work will be needed to advance a crosscutting research agenda on the systemic interactions between slowing productivity growth, increased inequalities, and evolving policies sets, with a view to exploring the possible upshots in individual country contexts, and the potential for cross-sectoral - and even cross-country - spill-over from prospective policy interventions. However, in many instances it is already clear how policy sets can be aligned to create win-win outcomes and much meaningful advice can already be proffered on a policy by policy basis, with - in many cases - clear indications as to a given policy's likely effects on productivity and inclusiveness.

This chapter considers how policies targeted at individuals, firms, and regions can be focussed on the twin objectives of promoting improved productivity growth and reducing inequalities, and how such measures can be supported by reforms to governance. In practice, setting in motion a virtuous cycle of improved productivity growth and greater inclusion means targeting those policy areas that can have the greatest effect in terms of positive spill-overs, whilst avoiding, or taking compensatory action to address, those that impose excessive costs, either in terms of hindering productivity growth or worsening inequality. The key policy messages to come out of this are:

Achieving stronger productivity growth and reduced inequality requires action to better ensure that all individuals have the skills to obtain rewarding and productive employment and that these skills are fully used. In unequal societies, low income households are less able to invest in education and take advantage of opportunities than their better-off neighbours. A productivity strategy that just focuses on businesses and innovations, or that relies on a race to the bottom - via low wages, dismantled social protection, or unacceptable working conditions - to increase the competitive advantage of firms and regions, whilst assuming that eventually everyone will benefit, will ultimately be less effective than a strategy that also addresses the disadvantages that hold people back from contributing to a dynamic economy. This suggests policies to ensure that individuals, and particularly those from lower income groups, are well equipped to fulfil their productive potential. Besides redistributive measures and active labour market policies, policy action should focus on: supporting the "Bottom 40%" in accessing quality education; in ensuring that training opportunities are also offered to low skill individuals and firms; and addressing barriers that disadvantaged groups face in important areas like access to digital technologies, innovation, finance, and entrepreneurship, and also simply in accessing good quality jobs. In a context of budgetary constraints, it is the prioritization that matters, rather than changing the entire policy framework.

- Businesses need an environment that allows them to prosper, and to upgrade or close down when necessary, that supports both innovation and experimentation at the frontier and its diffusion throughout the economy. They need an environment that ensures a level playing field for incumbents and challenger firms, that does not allow market power to result in excessive rents, but rather enables small innovative companies to access finance, technology, individuals with high quality skills, and ultimately to grow. Creating such an environment will require policy action in many areas, including: skills, labour markets, competition, product market regulation, financial regulation, innovation and government support for the corporate sector.
- While many productivity-promoting policy interventions are "spatially blind", others have an important place-based dimension. Policies concerned with improving information about labour-market conditions, better matching, training and/or subsidies to employers are likely to be better designed at regional or local level (or, at the least, with substantial scope for adaptation to particular places), since information about local conditions can be crucial to the effectiveness of such efforts. For similar reasons, economy-wide policies aimed at increasing skill levels must often undergo local adaptation to the characteristics of the local communities. At the same time, regional and urban policies can do much to reduce or remove the barriers that limit access to opportunity. Housing segregation by race or income and poor public services, in areas like health and transport, can lock individuals and groups into low-

productivity traps. Housing and transport policies play a key role in determining whether and to what extent disadvantaged groups can easily avail themselves of training or labour-market opportunities.

Achieving this may require changes to the policy making process and the conduct of public governance, and greater co-ordination at the international level. Countries vary in their experience and success in designing and implementing policy packages that require different government departments, agencies and ministries to work together to achieve shared goals and deliver Some countries ioined-up outcomes. have established modes communication, negotiation and accountability that need little or no adjustments; while others may need to work hard to create such modes. Policy coherence among different areas is a crucial element in this design. Policy coherence is also needed at the international level. In an increasingly interconnected world, the spill-over effects of domestic policies in the rest of the world cannot be ignored. Dealing with the policy issues that arise from the Productivity-Inclusiveness Nexus, whether it is ensuring that MNEs do not seek economic advantage and improved productivity growth by ignoring labour rights, working conditions, or environmental concerns, or establishing that each individual and company should pay their fair share in taxes, will require some form of international cooperation.

The chapter is organised as follows: section 1 reviews how policy can support individuals as they strive to fulfil their productive potential. Section 2 examines how policy can help all firms to become more productive, whilst also promoting inclusive growth. Section 3 is devoted to the changes to policy making required at the local and regional levels, whilst section 4 discusses implementation, emphasising the importance of a whole-ofgovernment approach, and the need to get political economy right to avoid piece-meal policymaking leading to both unfilled promises and unintended consequences.

#### 4.1 Empowering individuals to fulfil their productive potential

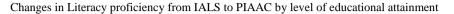
1. For individuals to contribute to - and benefit from - stronger productivity growth, policy needs to ensure that everyone not only has access to opportunities, but is also ready to take advantage of those opportunities when they come along. This suggests a number of focusses for policy to ensure that all individuals have the opportunity, are equipped to, and supported in, fulfilling their productive potential throughout their lives. This also suggests avoiding policies that lead to excessive labour protection or burdensome regulations that ultimately mostly benefit certain groups of the population at the expense of the most disadvantaged and may prevent the reallocation of resources to more productive activities. These efforts should include the provision of high quality education and life-long training, and measures to improve the use of skills and talents in the economy. and labour market policies that help people into higher quality more productive jobs. Such an approach must empower all of society, but focus particularly on connecting disadvantaged groups with opportunities, including in regions that have fallen behind, and reducing the barriers that they face in important areas like innovation, finance, and entrepreneurship, but also in simply accessing good quality jobs..

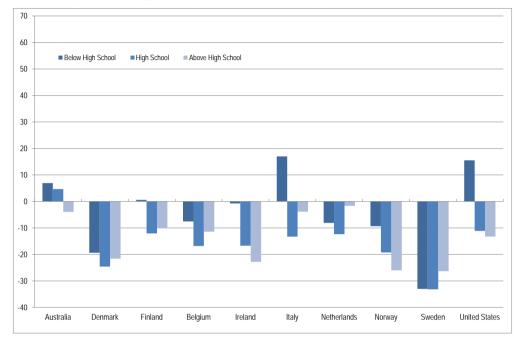
# 4.1.1. Ensuring that all individuals are furnished with better and more relevant skills is vital for expanding the productive base of an economy.

To help individuals fulfil their productive potential, policies need to both increase the quality of education at all levels and life-long learning systems and improve the use of skills in the economy. Although there has been significant progress in increasing the levels of educational attainment in many countries over recent years, in some countries this has been achieved at the expense of quality, leading to a decrease in the levels of basic skills acquired for each level of educational attainment (Figure 4.1). As a consequence, the pool of people with very low skills remains substantial and includes individuals with relatively high formal educational qualifications. Given the increase in the demand for highly skilled workers, driven by the rapid pace of technological change, the smaller differences in levels of educational attainment that remain, as well as considerable differences in the quality of education, are likely to have a greater impact today than ever before on employability, wages, and well-being. On the other hand, education outcomes are still closely related to the socioeconomic status of students in many OECD countries.

Going forward, we need to harvest the knowledge base developed by PISA to understand how to level the playing field, and how, by focusing on disadvantaged groups, countries can improve the performance of the population as a whole. However, we can already say that both breaking the link between socio-economic status and outcomes, and improving the level of skills in the economy at large, will call for continuing efforts to improve access to higher levels of education for more disadvantaged communities as well as action to strengthen the quality of education at all levels. In addition, there seems to be a growing divide between what people learn from the education system and what employers demand, creating the need to integrate new sets of horizontal skills in education systems, such as critical thinking, complex problem solving, innovation and team work. More research is required to assess the level of skill mismatch and the policies to address it.

Figure 4.1. The level of basic skills acquired for each level of educational attainment has decreased





Source: International Adult Literacy Survey (IALS) 1994-1998, and Survey of Adult Skills (PIAAC) 2012 (see OECD 2014a).

The most effective way to improve the quality of education is to focus on capacity building for schools in areas like: school leadership; the ability to train, support and retain high-quality teachers; and the capability to put in place effective classroom learning strategies. For instance, strong and effective leadership policies need to find the right balance between school autonomy, i.e. the degree of responsibility and the type of decisions that school leaders can make, and accountability. Attracting the best candidates to the teaching profession, supporting them and retaining high quality teachers are also important. It involves providing initial training, supporting teachers' professional development throughout their careers and promoting peer learning networks, as well as putting in place the right incentives in terms of working conditions and salary. Equipping students with the new sets of skills needed for the future, implies a profound transformation of the methodologies used in the classroom. This represents a huge challenge and requires training the teachers who are used to more traditional approaches.

Moreover, to ensure that all students develop their full potential it is necessary to evaluate their performance from very early on, so that additional support can be provided to students lagging behind.

A special focus on the disadvantaged groups is essential, as PISA analysis has shown over the years. All the factors and policies mentioned above are particularly important for disadvantaged students who tend to have a more difficult starting point. Schools with a larger proportion of disadvantaged students can only overcome the challenges they face if they are provided with the resources needed, the most important being the quality of the teachers. Often schools in poor neighbourhoods struggle due the lack of resources and the poor quality of the teachers. Countries which make an effort to provide additional support to these schools by sending high quality teachers and good leaders are able to reverse the trend and give these children a real opportunity to perform well in school and in life.

Education and training systems have to be oriented towards furnishing individuals with relevant skills for the labour market as well as to function in life more generally. Better policies will require integrated education and labour market reforms, with the aim of improving the quality of education systems, incorporating new horizontal skills, and achieving a better match between the needs of the labour markets and what students learn. In the case of tertiary education, for instance, this will require universities to build bridges with the labour market in order to teach the sets of skills which are useful for their students' professional careers. In areas like vocational training, systems tend to be better aligned with the labour market and have shorter cycles which make them easier to adapt, but in many instances such systems are in great need of modernisation to reflect the development of new industries, such as those related to the digital economy. Another key element of vocational training is ensuring that it equips students with the basic skills needed to cope with the transition of moving from one job to another

Policies need to address the waste of productive potential that occurs when women are discouraged from pursuing careers in STEM subjects. Women are highly underrepresented in Science, technology, engineering and mathematics (STEM) careers despite the fact that girls perform about as well as boys in high school science. It goes without saying that there are innumerable valuable career paths outside of STEM subjects, but science, technology, engineering and mathematics are important sources of innovation and productivity, and they are integral to the success and progress of modern economies. Talent and productivity are lost when young people, particularly women under-engage in STEM training and jobs, particularly given the persistent labour shortages in the STEM field in many countries. In attempting to explain this mismatch between abilities in school

and later entrance into science-related jobs, "intangibles" like selfconfidence are important determinants. Girls report being less confident in their maths and science abilities than boys, but these gender disparities in self-belief are greater than actual gender differences in performance. To address these differences, and encourage more girls to enter productivityenhancing STEM fields, parents and teachers should be trained to be aware of their own gender biases, and schools should engage in helping students understand the potential careers ahead of them – particularly those in science, technology, engineering and mathematics (OECD 2015a).

Individuals who have already left the education system can benefit from high-quality life-long learning programmes. This is particularly important for retraining workers exiting declining industries and upskilling those in fast-moving sectors, who risk being left behind by technological advances. High-quality life-long learning programmes can improve and expand the skills of current workers, and allow them to receive training whenever needed, to help them change fields or as part of efforts to improve the quality of their jobs. However, rolling out such programmes on a large scale is a major challenge, given the large pool of low-skilled workers, and the difficulties of reaching the people who need training most. In many countries life-long programmes already exist, but incentive systems - for employers offering training and individuals participating – do not encourage the participation of the low-skilled. Consequently, the design of such programmes including ease of access and the incentives for provision on the part of employers and participation on the part of employees will be key.

Support to enhance the skills of SME workers and new entrepreneurs is necessary. SMEs are particularly affected by the issue of lifelong learning, as they are less likely to have their staff participate in continuing formal vocational education and training than larger firms, which suggests that there is a need for specific solutions focussed on SMEs.<sup>26</sup> OECD work (OECD 2013a) suggests several avenues that can be pursued, such as measures to support formal training like the introduction of dual training schemes and in-work training subsidies. In addition, the role of formal recognition for employee skills (particularly in knowledge-intensive service activities) is key. Finally, it is also important to support the acquisition of entrepreneurship skills through training, coaching and mentoring to help more people create their own jobs and improve their chances of developing sustainable businesses. Entrepreneurship policy has to combine the practical

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In Europe the share of employees participating in employer-financed continuing vocational training in 2010 was only 25% in enterprises with 10-49 employees, against 34% in enterprises with 50-249 employees and 46% in enterprises with at least 250 employees (Cedefop, 2015).

skills needed to start and operate a business with other support, such as financial assistance or business counselling. All of these policies should include, as a matter of course, better provision of information about labour market prospects to students and workers, including foresight exercises examining future labour market needs.

Everywhere, skills policies need to be complemented with specific measures focussed on tackling the growing digital divide. The rapid evolution of knowledge and pace of technological change implies that education systems should integrate new sets of skills which equip individuals with the ability to keep up throughout their professional and personal lives in this rapidly evolving ecosystem. Moreover, given the large economic and social externalities of digital technologies, governments should put in place measures to make ICT adoption and use affordable for everyone. As competition generally brings about more investment, better quality, greater supply, and lower prices, the creation of a competitive framework is the single most important initiative that authorities can take to increase affordability. Yet, even with a perfectly competitive market, a proportion of the population may not be able to afford some services deemed as essential to participate in economic and social activities. This requires explicit intervention from the government, for instance, through universal service policies.

## 4.1.2. Efforts need to be taken to reduce skills mismatch in the labour market.

Policies to improve the skills of the labour force need to be complemented by measures to foster a better allocation of skills within the economy and encourage their effective use in the workplace. The potential for better skills for more individuals to result in improved well-being and higher productivity gains will only fully materialise if workers and firms make full use of these skills. To be successful, productive firms need to be able to hire workers with the right competencies, while avoiding trapping workers in jobs that are not the right match for their skills. On average across OECD countries, roughly one-quarter of workers report a mismatch between their existing skills and those required for their job – i.e. they are either over or under-skilled. OECD estimates suggest that a better use of human talent in countries where skill mismatch is very high, such as Italy and Spain, could be associated with an improved level of labour productivity on the order of 10% (Figure 4.2). The growing gap between education qualifications and the actual level of skills mentioned above means that when employers use qualifications as a proxy for skills, this may lead to placing people in the wrong jobs. This problem is particularly acute among young people looking for their first job. Reducing the skills mismatch requires a combination of policies that include labour market, education and product market regulation measures.

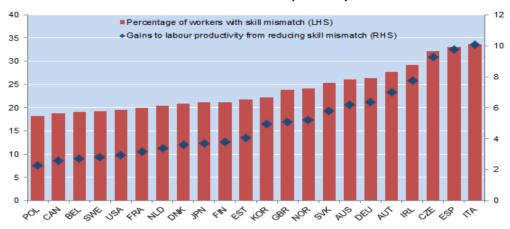
Skills mismatch can be reduced through good labour market information on skills needed by employers and making education and training systems and the learning choices of individuals more responsive to current and emerging skill needs. This requires good co-ordination between the key stakeholders in the planning of the exercises, the data collection, the sharing of the results and their use to inform policy in several different areas ranging from employment to education and training to migration policy. Moreover, successful skills policies based on this information require effective governance spanning both the worlds of education and work. A survey by the OECD of country practices in achieving these objectives finds that some countries do better than others. For instance, the strength of Norway's skills assessment and anticipation exercises is based on the joint involvement of the employment and education authorities in the design and development of the forecasts carried out by Statistics Norway, which ensures that they understand the outputs and use them for policy making (OECD 2016a, forthcoming).

Better matching of skills and jobs can be facilitated by higher participation in lifelong learning. As noted above, adult learning policies that encourage investment in the development of skills which complement technological progress are central to boosting productivity at the individual level, and when specifically tailored they can also contribute to better matching of skills and competencies to jobs. OECD estimates suggest that increasing participation in lifelong learning programs from the low level in Italy to the median level in Estonia is associated with a 6 percentage point decrease in mismatch (Adalet McGowan and Andrews, 2015a).

Addressing skills mismatch requires new management practices. Better evaluation by employers of the actual level of skills of their employees rather than relying on educational qualifications as a proxy for their skills, and, more generally, adopting appropriate work organisation and management practices can help bridge the gap between the skills possessed and skills used at work. The way work is organised - the extent of team work, autonomy, task discretion, mentoring, job rotation and applying new learning – influences the degree of internal flexibility to adapt job tasks to the skills of the workforce. Some management practices – bonus pay, training provision and flexibility in working hours – provide incentives for workers to deploy their skills at work more fully. Such practices are common in the countries that make better use of their human capital (OECD, 2016b).

Figure 4.2. There is plenty of scope to boost productivity by reducing skill mismatch

Skill mismatch and labour productivity



The figure shows the percentage of workers who are either over or under-skilled, and the simulated gains to allocative efficiency from reducing skill mismatch in each country to the lowest level of mismatch. Under - (over-) skilled workers refer to the percentage of workers whose scores are higher than that of the min (max) skills required to do the job, defined as the 10th (90th) percentile of the scores of the well-matched workers in each occupation and country. Source: Adalet McGowan and Andrews (2015a).

Labour market and housing reforms that increase labour mobility can also improve the allocation of skills. Policies that reduce excessive stringency of employment protection legislation for regular employees can also help to reduce the skills mismatch: OECD estimates show that a reduction from the maximum level (in Germany) to the median level is roughly associated with a 3 percentage point reduction in skill mismatch (**Figure 4.3**). As discussed in Chapter 3, EPL that encourages a 'dual labour market' of insiders and outsiders can be particularly unfortunate in its effects on skills mismatch. Housing policies also can also increase residential mobility by removing housing supply restrictions (i.e. stringent land-use regulations) or by reducing the transaction costs affecting the buying and selling of dwellings. OECD estimates (Adalet McGowan and Andrews, 2015b) suggest for instance that reducing transaction costs from the highest level (Belgium) to the median level (Finland) is associated with a 7 percentage point reduction in mismatch.

The probability of skill mismatches and selected policies Effect at policy median (Italy) Maximum (Belgium) Minimum (Italy) Maximum (Germany) Maximum (Slovak Republic)

Figure 4.3. Policy reforms can help reduce skill mismatch

0.32 0.30 0.28 0.26 Maximum (Poland) 0.24 0.22 0.20 Minimum (Netherlands) (Korea) Minimum 0.18 (Denmark) Maximum Minimum Minimum (Denmark) (United States) (Norway) 0.16 Cost of obtaining Participation in Product market Cost of closing a Transaction Employment protection a building permit lifelong learning regulation business costs legislation

Notes: The dot is the average probability to have mismatch evaluated at the median level of the policy and individual characteristics, which include age, marital and migrant status, gender, level of education, firm size, contract type, a dummy for working full-time and working in the private sector. The distance between the Min/Max and the median is the change in the probability of skill mismatch associated with the respective policy change. See Chart 4.2 for the definition of skills mismatch.

Source: Adalet McGowan and Andrews (2015b)

Policies that facilitate both business entry and exit can also help reduce skill mismatch. High rates of skill mismatch often occur when an economy has a high proportion of long-established, unproductive firms that tend to use high-skilled labour less effectively. The creative destruction of unproductive firms to free up scarce resources and improve skills allocation can be encouraged through policies that facilitate both business entry and exit. For instance, Adalet, McGowan and Andrews (2015b) show that reducing the stringency of bankruptcy legislation from its most restrictive level in Italy – where mismatch and the share of old and small firms are very high - to the median level in Canada is associated with a 10 percentage point decrease in skill mismatch. Skills utilisation across the economy could also be increased by policies aimed at promoting training and the use of 'learning organisation' work practices in SMEs (OECD, 2013a; Lorenz and Potter, forthcoming).

# 4.1.3. Labour market policies need to help people move into higher quality jobs, whilst ensuring that no one slips through the cracks.

Appropriately-designed unemployment benefits combined comprehensive activation policies can help people move into new jobs. Benefit systems raise labour market security, help people transition into new employment, and reduce inequalities - notably during deep recessions when the risk of long periods of joblessness is substantial and loaded with the potential to leave deep scars on future career prospects. 27 There is also some evidence that unemployment benefit generosity has a positive impact on worker mobility in OECD countries. This is because the extra income gives workers the opportunity to spend more time finding a job that better matches with their skills. However, the longer a spell of unemployment lasts, the more existing skills weaken. However, there is a balance to be found between a benefit that is sufficiently high that people are able to take time to find an appropriate new job, and ensuring that this does not take so long that their employability is damaged. Higher benefits can be paid when income support for job losers is accompanied by policies that place a strong emphasis on activation, like job search or training requirements, ensuring that matches are found quickly and skills do not degrade.

Improving work-life balance can help support efforts to keep productive workers in their jobs. Childbearing and child-raising years largely coincide with years that are critical to career development. Productivity suffers when trained workers permanently quit their jobs, but social support can help parents stay in the labour market. When parents have paid leave and job security after the birth of a child, they are more likely to return to employment and to the same job (Adema, Clarke, and Frey 2015). After leave periods end, affordable access to early childhood education and care (ECEC) is perhaps even more important for enabling parents of young children to engage in paid work (Thévenon 2015).

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Recent OECD work suggests that unemployment benefit systems play a considerable role in smoothing income fluctuations for vulnerable workers, reducing earnings volatility<sup>27</sup> by 15%, on average across the OECD, among those workers most exposed to unemployment risk and low-paid employment (OECD, 2015b). However, the estimated effects vary greatly across countries, from more than 30% in Finland, Denmark and Belgium to less than 3% in Italy and Turkey, suggesting that there is scope for countries to learn from the experience of others.

A ten-percentage-point increase in the average replacement rate – a large reform from a historical perspective – is estimated to increase, on average, gross worker reallocation by about 1 percentage point (OECD, 2010a).

In many countries, demand for ECEC outstrips supply, which inhibits parents (typically mothers) from working full-time. Childcare issues continue when children enter primary school, and out-of-school-hours support is important for ensuring that parents who want to work full-time are able to do so. Flexible work arrangements are also useful for enabling parents to remain in work while raising children. Additionally, strong evidence has been found regarding the equalising function that early childcare services render to those at the bottom of the income distribution. This is one of the most important investments that countries can make in order to address both current inequality, and support future sources of productivity growth. When confronted with resource allocation decisions, alongside the education system, investing in child care facilities is one of the most promising areas.

In emerging economies, curbing informality and hence the incidence of both low-productivity and low-quality jobs should be pursued. Governments can help promote formalisation of labour relations by improving regulations in product and labour markets, strengthening the design of simplified and presumptive tax regimes as well as tax enforcement, improving the quality of public services delivered to formal sector workers, and by strengthening the link between contributions and benefits in social protection schemes. In Chile, for example, the government incentivised workers to join the formal sector through the introduction of individual unemployment saving accounts, demonstrating how the costs of formalisation can be clearly linked to its benefits. In addition, steps can be taken to lower the costs of formality for employers and the self-employed. Simplified tax and administrative systems, streamlined registration processes and a reduction in red tape are crucial steps in this direction.

#### 4.1.4. Promoting better health provides people with a platform to fulfil their productive potential.

Unpacking the mechanisms by which socioeconomic factors affect health can help shape suitable policies to improve individuals' health and ultimately have beneficial effects on productivity. People in ill-health are less able to take part in productive activities, but people working in poor labour conditions are also more likely to find themselves afflicted by ill health. Early results from OECD analysis show that income, lifestyle choices and the environment are all significantly associated with gains in life expectancy (James, Devaux et al 2015), which indicates that policies aimed at improving health should look beyond the health sector alone. Persistent poverty has particularly adverse health effects, and falls in income have a larger health impact than income gains, with the unemployed suffering worse mental and physical health outcomes. The quality of employment is also crucial, with the biggest factor in this regard being good management that provides clarity, support, feedback, and adequate recognition of work to the worker. Education also confers health gains not only from lifestyle choices, but also by enabling people to access and use suitable health services.

Addressing the determinants of population health and health inequalities will require investment across multiple sectors and close collaboration on policies amongst stakeholders who do not necessarily work together on a regular basis. For example, the integration of health, education and social services, as in Scotland's *Early Years Collaborative* programme, demonstrates the possibilities for achieving better quality, person-centred care and improving population health outcomes (OECD, 2016c). In the area of public health, interventions aimed at tackling obesity have been shown to be more effective when adapted to social, cultural and environmental contexts (Sassi, 2010). The private sector also has a role to play.

Public-private collaborations are increasingly used by countries for public health purposes. For example, the food industry has been involved in obesity prevention strategies through self-regulation of food adverting to children and voluntary schemes for food labelling. Such voluntary arrangements have worked in some cases but have often failed: a vital element for ensuring that they are not just superficial public relations exercises is independent evaluation of their effectiveness and a strong commitment by the public sector that they will intervene with other measures if the voluntary schemes are no successful (OECD 2015c). There is also close collaboration between fiscal authorities and the health sector in OECD countries regarding the implementation of sin taxes targeting alcohol, tobacco and unhealthy food consumption, such as the sugar taxes in Hungary, Finland and Mexico (WHO, 2015; Colchero et al, 2016).

Integrating health concerns into housing, education and social protection policies can help maximise the health effects from such policies. Collaboration across sectors is particularly important for mental ill-health, requiring concerted action in health, youth, labour market and social policy areas. In Belgium, the Flemish Public Employment Service funds a special programme developed in co-operation with the mental health and welfare sectors, designed for jobseekers with severe psychological and psychiatric problems. This programme showed positive health responses with increased screening, and improved employment outcomes (OECD, 2015d). All of these policy fields should seek to achieve a shift in the timing and the modalities of policy intervention and in the actors involved in accomplishing change. This is the purpose and subject of the 'OECD Recommendation on Integrated Mental Health, Skills and Work Policies' which aim to promote a process of mutual learning on policies to support people living with mental

illness and provide guidance to national policy development in a complex field that is essential for achieving better social, education and labour market outcomes and thereby more inclusive growth.

#### 4.2 Helping all firms to become more productive and support Inclusive Growth

Individuals have little chance of being able to fulfil their productive potential if firms are not empowered to fulfil theirs. Indeed, businesses have a crucial role to play in making productivity growth more inclusive. Businesses are uniquely situated to provide employment opportunities, contribute to skills development and engage in knowledge and technology diffusion, particularly for emerging economies. But this requires a business environment that allows them to do so, and also that ensures a level playing field. At the same time, it is also important that such a business environment fosters responsible business behaviour engendering respect for labour rights and the environment, whilst also ensuring that firms pay their fair share in taxes

Creating an environment that enables the business sector to achieve stronger and more inclusive productivity gains will call upon governments to find a balance between three different important objectives. Policy makers need to deploy a range of policies that: enable the most innovative firms to invest in frontier innovation and access skilled workers, finance, and markets; support the diffusion of innovation throughout the rest of the economy and across the world, thus enabling all firms to benefit from these innovations and grow; and facilitate the exit of the least productive firms which can serve to free valuable resources, including workers, from being trapped in unrewarding environments. Achieving these three policy objectives will require policy changes in many areas from competition and product market regulation to innovation and financial policies.

#### 4.2.1 A level playing field for all firms increases productive potential and under most circumstances will reduce inequality.

Competition and robust business dynamics – entry, growth, decline and exit of firms – are key for the diffusion of innovation, helping to reduce the persistence of rents, and increasing the share of resources in higher productivity firms. Stronger productivity growth depends on strong business dynamics, where new innovative firms are able to enter the market and flourish while less productive businesses, operating well behind the frontier, are encouraged to either upgrade or exit the market. There is strong empirical evidence that competition supports productivity growth by allowing firms with new business practices to enter and disrupt the market,

incentivising existing firms to adopt better technologies and practices and to improve managerial performance, whilst also resulting in a more rapid turnover of firms.

Efforts to boost the productive potential of firms need to be pursued in unison with - and in a manner that complements - policies to promote inclusiveness. In order to ensure that a dynamic business environment leads to both greater productivity gains and more inclusive growth, the policy levers which affect firm entry, growth and exit must complement those which relate to labour markets, and thus the employment decisions of firms. For example, the provision of unemployment benefits combined with policies that place a strong emphasis on "activation" can ensure that unemployment duration is reduced, avoiding depreciation of human capital, as noted in Section 4.1, but can provide the most productive firms with the supply of skilled labour needed to grow.

There are several areas in which even the most effective OECD competition regimes could be improved. Even where countries have strong competition laws, regulatory barriers often still allow for the existence of monopolies. Such regulatory barriers are particularly damaging in the service sectors, which play a key role in the productivity of downstream sectors and enable countries' participation in global value chains. Redesigning overly rigid regulations thus ought to be a priority, so as to ensure that they can still achieve their social purpose without impeding competition. The OECD Competition Assessment Toolkit can help governments to identify and revise these anti-competitive regulations. In addition, more could be done to ensure competition law is respected by enterprises, notably in the case of mergers, cartels and abuses of market power by dominant companies. Greater international co-operation is also needed as law enforcement is national (or EU-wide) while the biggest businesses are global. More joined-up work on cross-border cases could make competition law more effective and improve enforcement against enterprises that violate competition laws. Encouraging FDI by removing barriers to cross-border investment would also increase competition pressures.

Innovation challenges competition policy-makers and tests the tools they use for assessing market power and its abuse. The task of competition policy-makers is complicated by rapid technological change, and especially that associated with the digital economy. Innovative products are sometimes so different from incumbent products that they do not 'compete' in the incumbent's market, but rather disrupt it from outside (as lightbulbs did to candles). New market structures – including inter-platform competition, two-sided markets, and strong network effects – may also complicate the enforcement of competition law (OECD 2013b). The timing of any

intervention can be especially tricky: although it is necessary to act before dominance is entrenched, competition enforcers should be wary of intervening too readily in still-competitive markets. Their challenge is to keep digital markets open and innovative without inhibiting the process of "creative destruction" that has driven much of the technological progress in these markets.

New approaches are needed to avoid regulatory capture. The extent to which incumbents are able to influence the policy and regulatory framework is cause for concern.<sup>29</sup> Avoiding regulatory capture in favour of the commercial or special interests that dominate in an industry or sector requires use of evidence based decision-making processes, taking better account of impact assessment, transparency and use of public consultations to give each of the interests a chance to be heard and reflected can help reduce the risk regulatory capture. Alternative methods of regulation, such as co-regulation and self-regulation are increasingly used in some countries. While OECD governments have been making progress in this area, constant vigilance and appropriate governance mechanisms are required.

#### 4.2.2 Efforts need to focus on generating better business dynamics.

Policies that promote efficient firm entry and exit are essential. Pushing out the frontier requires enabling experimentation with radical new technologies and business models. Since new firms are often the vehicle through which new technologies and business practices enter the market, the policy framework should be conducive to firm entry and framework conditions which foster competitive markets are a necessary condition for ensuring that innovative new firms can get a foothold in the market. Based on evidence presented in Calvino et al (2016) it is found that start-ups are systematically more exposed to the policy environment and national framework conditions than incumbents. Unfortunately, in some cases policies and regulations can unintentionally serve as barriers to the entry of new technologies and business practices. For example, in the case of driverless vehicles, the Geneva Convention mandates the presence of drivers in a vehicle, and could thus be an obstacle for new business opportunities.<sup>30</sup>

The policy environment should not only encourage the entry of new firms and enable them to grow, but it should also encourage unsuccessful firms to close down. In this vein, an enterprise failure needs to be recognised

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See Calvino, Criscuolo and Menon, (2016) and Aghion et al. (2015).

There is, however, some ambiguity as to whether the Convention only covers cross-border travel. See Geneva Convention on Road Traffic, with Annexes & Protocol, Dated at Geneva Sept. 19, 1949; T.I.A.S. No. 2487 (Mar. 26, 1952).

as an opportunity for the entrepreneur to learn and rebound, finding new opportunities which lead to more rapid growth, and thus to new employment opportunities. This in turn facilitates more effective knowledge diffusion. In practical terms, this calls for a number of measures, notably bankruptcy legislation that does not excessively penalise business failure.

Subsidies to certain sectors need to be phased out as they hamper the reallocation process. In many sectors, regulatory protections or government subsidies allow less competitive firms to remain in the market, blocking the entry and growth of more successful firms. The energy sector is a case in point, with adverse implications for both the economy and the environment. There are 550 measures supporting coal, oil and gas production and use across the 34 OECD countries, representing an annual cost of USD 55-90 billion between 2005 and 2010. This support effectively "locks in" less productive and higher polluting technologies and firms. A similar problem exists in the steel and shipbuilding sectors, which have been plagued by excess capacity, and are sectors in which policy distortions play an important role.

Policies need to ensure that companies invest in productive activities. Data analysis of 11 000 of the world's largest companies has shown that there is a misallocation of capital that needs to be improved in order to foster productivity growth and long-term value creation that can allow for inclusive growth. Promoting competition and putting protected state-owned enterprises (SOEs) on a level playing field with the private sector can support such efforts and also limit unproductive concentration of profits and wealth.

Governments need to ensure that the stringent environmental policy settings required to make the necessary transition to a low-carbon economy encourage new investments and do not unduly favour incumbents. It is important that environmental policies do not inhibit market entry or competition, give established firms advantages over new entrants in the market, or drive up administrative costs unnecessarily. The widespread prevalence of 'vintage-differentiated" environmental regulations has a similar effect as subsidies, with new plants subject to more stringent regulations than incumbents, effectively discouraging new investment and the exit of plants which are less efficient and generate more pollution (Johnstone et al. 2015). Albrizio et al (2014) shows that stringent environmental policies can be implemented with minimum barriers to entry and competition, as is the case in Austria, Netherlands and Switzerland. To ensure environmental policies promote productivity and competition as well as strong environmental outcomes, governments should to the extent possible, use flexible policy instruments that enable firms themselves to choose the most efficient way to innovate and adjust in response to new

environmental policy measures. Market based instruments tend to provide firms with greater flexibility in reducing environmental impacts (i.e. by allowing them to choose either most suitable technology solutions, or the timing of adjustments).

#### 4.2.3. Innovation policies need to be recalibrated to support innovation without privileging the position of incumbents and adapt to the increasingly global nature of innovation.

Well-intentioned policies designed to boost innovation may inadvertently give an edge to incumbents at the expense of innovative startups. While recent evidence indicates that more innovative economies have greater upward mobility (Aghion et al. 2015), ensuring that this is generally true is dependent upon policy conditions. In particular, tackling rent seeking behaviour and ensuring a level playing field is not just about competition policy and product and financial market regulation, but also concerns IPR protection (including copyright systems), and research and development (R&D) incentives that may give too much support to incumbents rather than also enabling challengers.

Patent systems should not unduly create obstacles to entry. In some sectors where the innovation process is typically fragmented (e.g. software), the patent system may unduly favour incumbents at the expense of young firms (Cockburn, McGarvie and Muller, 2009), thus undermining productivity. Improving the transparency of the patent system is essential to ensuring that patents do not become a significant obstacle to entry and further technological development. In addition, improving disclosure and dissemination of the information contained in patent applications could boost the impact of patented inventions on subsequent technological developments.

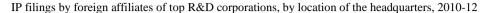
Innovation support needs to be carefully reviewed. Continued and effective public funding of research is crucial for moving the global frontier and compensating for the inherent underinvestment in research due to the partial appropriability of the resulting discoveries. It is however also essential that such support is targeted to activities that have positive spillover effects, is cost-effective, and does not create unintended distortions. R&D incentives should be designed so as to be equally beneficial to incumbents and new firms. For instance, provisions for immediate cash refunds for R&D tax credit or allowing firms to carry associated losses forward to deduct against future taxable income can help ensure that young innovative firms, that typically make losses in the early years of an R&D project, can benefit equally from such tax support. For example, in the United Kingdom, loss-making SMEs - which have no liability for corporation tax - can claim a 14.5% payable tax credit.

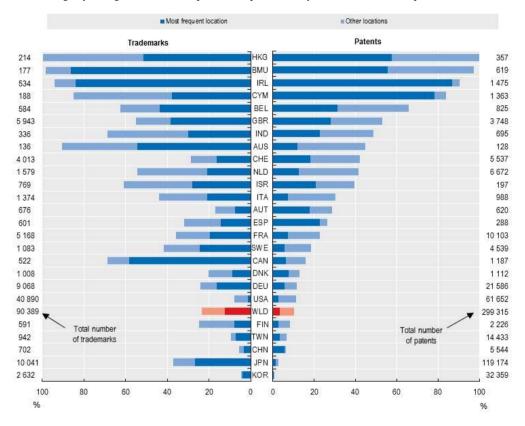
The global nature of frontier firms also suggests a need to co-ordinate R&D fiscal incentives and to ensure a global coherence of intellectual property right (IPR) regimes to provide a level playing field. Rising international connectedness and the key role of MNEs in driving frontier R&D imply that the benefits from public basic research and support to private R&D will become more widespread globally. This may weaken incentives for national governments to support these activities (Braconier et al., 2014) while at the same time pushing them to compete to attract mobile investments by multinational enterprises (MNEs). Thus, global mechanisms to support basic research – i.e. joint funding and mechanisms to facilitate cross border and cross-field collaboration – will become increasingly desirable in the future (OECD, 2012a). A global coherence of intellectual property rights (IPR) regimes – e.g. via the continued international harmonisation of national patents systems and subsequent enforcement of these measures – may also need to be fostered.

The globalisation of innovation puts added pressures on the level playing field. The increasingly global nature of innovation also creates greater opportunities for shifting intangible assets from high-tax rate to low-tax rate countries, putting pressure on national tax systems and the need for a comprehensive and internationally coordinated revision of the international tax rules. The latest evidence on IP filings by affiliates located in countries other than the headquarter country (Figure 4.4), illustrates this phenomenon. While such filings may be undertaken for a variety of reasons, the increasingly global nature of innovation, and the rise of global supply chains and knowledge-based assets has resulted in greater opportunities for multinational enterprises using cross-border tax strategies to shift profits generated by knowledge based capital (KBC) across countries (OECD, 2015e). This may lead to unintentionally high levels of total tax benefits for R&D and place domestic 'stand-alone' firms that perform R&D at a competitive disadvantage.

Cross boarder approaches, such as that embodied in the OECD/G20 Base Erosion and Profit Shifting (BEPS) Project shows the way forwards. The BEPS project proposes changes to the Transfer Pricing Guidelines that will ensure that the transfer pricing of MNEs, particularly in the area of hard-to-define intangibles, better aligns the taxation of profits with economic activity (BEPS Explanatory Statement 2015). Recent OECD work on the BEPS project highlights the potential benefits of international co-operation to limit unintended tax relief for R&D stemming from cross-border tax planning (OECD, 2015e).

Figure 4.4. The increasingly global nature of innovation has resulted in greater opportunities for shifting intangible assets





Note: The figure refers only to IP (patents and trademarks) filed by affiliates at USPTO and EPO/OHIM. The bars show the percentage of IP accounted for by foreign affiliates of R&D corporations by location of the headquarters

Source: OECD, STI Micro-data Lab: Intellectual Property Database, http://oe.cd/ipstats, June 2015.

#### 4.2.4. Action to promote more inclusive financial markets is central to ensuring that SMEs have access to the requisite financing.

It is essential to ensure adequate financing for different economic activities, including for innovative and growth-oriented small businesses. Small businesses and particularly new and innovative SMEs, often face the consequences of market failures in accessing external financing, limiting their ability to invest, innovate and contribute to productivity growth.

Access to both traditional banking and diverse non-traditional financing instruments and channels should be strengthened.<sup>31</sup>

Efforts to improve banks' capacity to lend to SMEs should be pursued. Bank credit remains the main source of external finance for most small businesses. Risk mitigation measures should be strengthened, making use of new technologies and mechanism for underwriting risks, including credit scoring models. Effective and predictable insolvency regimes should ensure creditor rights, while supporting healthy companies and offering a second chance for honest entrepreneurs. Greater transparency, including through strengthened information infrastructure for credit risk assessment, could help overcome the obstacles to access and uptake of debt and non-debt instruments by young and small businesses.

New forms of financing to increase the availability of risk capital, including by institutional investors, need to be promoted. There are several new forms of financing that could be further developed to facilitate the financing of innovative businesses including seed and early-stage equity finance, such as venture capital and angel investment. Hybrid instruments, which combine debt and equity features, may also serve both young and established companies that seek expansion capital, but which are not suitable for public listing or do not want the dilution of control that would accompany equity. At the same time, the public listing of SME equity through primary and secondary issuance has the potential to provide funding for firms' growth and can support subsequent debt financing, although markets are currently small. Crowdfunding, which is still in the early stages of development as a source of business finance, is also expected to play an increasing role in the future, and could be harnessed to finance innovative SMEs. At the same time, SMEs' awareness and understanding about these alternative financing instruments needs to improve as does the quality of their investment projects and their ability to deal with investor due diligence requirements.

The use of patents and other intangibles as collateral is another promising avenue for small innovative firms, but this requires improvements in Intellectual property (IP) markets. Some young firms have untapped resources in the form of IP, which – if it can be properly valued and if markets for IP-based financing are functioning well – could be used to persuade lenders and investors to provide financing. A substantial body of empirical work has found that young, high-growth firms with IP assets receive more financing than similar firms without IP. Nevertheless, IP-based finance is significantly under-used, especially by SMEs that are most in

See the G20/OECD High-Level Principles on SME Financing, November 2015.

need of it because of the lack of opportunities to sell IP in secondary markets and, in some countries, a lack of effective IP enforcement. Promoting the use of patents and other intangibles as collateral requires greater transparency of IP ownership and transfer information as well as new IP market infrastructure. Government agencies and development banks can also help manage the risks associated with collateralising IP through risk-sharing mechanisms.

#### 4.2.5. Regulation needs to ensure that the financial sector is supporting access to finance for all.

Regulatory approaches will need to find the right balance between not stifling useful financial innovations too early while keeping risks in check. While financial innovations can improve financial intermediation and allow retail investors and borrowers to reap the benefits of a widening choice of instruments, financial consumer protection, and - when needed - regulation, will have to be strengthened to address risks that arise from innovations that may be harder to assess and have the potential to create vulnerabilities especially at the retail level.

Policymakers should implement measures to reduce explicit and implicit subsidies to too-big-to-fail financial institutions and reduce the tax bias against equity. Guarantees to too-big-to-fail financial institutions are not only likely to raise financial sector pay – a "financial sector wage premia" that contributes to inequality (Chapter 3) – but also to result in more and cheaper 'subsidised' bank lending from which well-off households tend to benefit relatively more. Likewise, reducing the tax bias against equity would also help to reduce inequalities in financing.

#### 4.2.6. Several policies can be deployed to help promote financial inclusion.

Facilitating access to finance for entrepreneurs from disadvantaged and under-represented groups is vital component of financial inclusion. Access to finance in one of the largest barriers prospective entrepreneurs face, but policy can help. Key instruments used to facilitate access to finance for entrepreneurs from disadvantaged and under-represented groups include microfinance, grants, and loan guarantees. These tools have succeeded at providing incentives to the private sector to lend to these groups. Welfare bridge schemes, which pay an allowance or unemployment benefits for a fixed period of time to cover social security contributions and living expenses during business start-up, have also proven to be successful when well-designed (Box 4.1).

#### Box 4.1. Bridging Allowance, Germany

The objective of the Bridging Allowance is to give unemployed individuals an alternative option to re-entering work through business creation. Subsidies are provided to unemployed individuals in order to provide an income while they are starting their business. The individual receives the same amount they would have from unemployment benefits, with an additional EUR 300 for social security contributions. The benefits are guaranteed for 6 months, with the option to extend it for an additional 9 months (provided the individual carries on with their self-employment initiatives). To receive this allowance, the individual must have been eligible for unemployment benefits for at least 150 days and have produced a business plan that has been approved by a chamber of commerce or similar institution.

Survival rates for start-ups 56 months after creation ranged between 55-70%, depending on cohort and region, which is slightly above the rates for the normal business population. 40% of recipients had at least one other employee in their business. In addition, approximately 20% of users found regular, gainful employment after the programme. Those in the programme spent 20 months longer in employment and had higher labour incomes on average than unemployed individuals who started their business without any support.

Policies intended to reduce barriers to access of appropriate financial products (such as savings, credit and insurance) should be designed taking into account the circumstances and vulnerability of the financially excluded. In particular, there is growing evidence that the financially excluded also have lower levels of financial literacy. Analysis of financial literacy and financial inclusion among adults in 12 countries showed a correlation between higher levels of awareness of different types of financial product and financial literacy scores (Atkinson and Messy, 2013). Similarly, the OECD PISA assessment shows that on average 15-year-olds who hold a bank account have higher levels of financial literacy than other students (OECD, 2014c). The correlations do not prove causality, but they provide a compelling argument that the financially excluded have a pressing need to access financial education alongside financial products.

Demand-side approaches to financial inclusion therefore need to address widespread financial illiteracy whilst also ensuring a robust and responsive financial consumer protection framework. Such a framework should in particular cater to the needs of new and potential consumers as they navigate the fast evolving financial landscape. When authorities struggle to reach at risk groups like women, migrants or youth (OECD, 2013c; OECD, 2014b; Atkinson and Messy, 2015), existing environments (such as the workplace or schools) and trusted intermediaries or networks with access to the target group may be better placed to deliver financial education and provide information about appropriate financial products. This approach requires

that the goals of the intermediary and networks are aligned with the financial education goals, and that the staffs are properly trained and incentivised to provide financial education.

#### 4.3 Taking a regional perspective

A better understanding of the regional (and spatial) dimensions of policies is necessary to enhance productivity growth and social inclusion. The design, delivery and effectiveness of productivity and inclusion enhancing policies depends in part on the type of region (urban, rural) and its characteristics, such as population density, established sectors and the quality of public infrastructure and services. In rural areas the quality of education tends to be lower than in urban areas, which implies that in these areas the level of skills may be more limited. Individuals, particularly the low-skilled, are less mobile than the high-skilled; therefore effective urban planning and transport investment is essential to better match existing workers to jobs. There are also many place-based factors that affect job accessibility that warrant local action. Geographic proximity helps certain elements of the innovation diffusion process; therefore regional-level policies can accelerate innovation diffusion, particularly to SMEs. National economy-wide policies also need to be complemented by spatial policies, to account for the circumstances of particular places - in areas like labour markets, skills policy and product market regulation - and also to address barriers to opportunity that many groups face as a result of inadequate access to high-quality public transport systems and housing.

#### 4.3.1. National policies to boost productivity and foster inclusiveness need to take into account the spatial dimension

Agglomeration economies give advantage to metropolitan regions and their productive capacity through a variety of channels. Generally the colocation or agglomeration benefits are due to more specialised service providers, better labour market matching and knowledge spill-overs.<sup>32</sup> Metropolitan areas also gather a diversity of firms in close proximity, above and beyond the density of firms, a phenomenon that also can lead to more innovation.<sup>33</sup> The concentration of highly educated workers further boosts

<sup>32</sup> The benefits of agglomeration have been discussed for a century, starting with Alfred Marshall. See Duranton and Puga (2004) for a review of the drivers of agglomeration benefits. For a recent review of agglomeration and innovation, see Carlino and Kerr (2014).

<sup>33</sup> The concept of Jacobian diversification externalities was popularised by the urbanist Jane Jacobs.

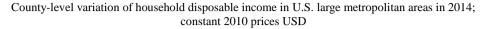
productivity. Human capital spill-overs allow individuals to benefit by virtue of being co-located with others that have a higher level of education. For a 10 percentage point increase in a city's share of university graduates, the productivity increases by about 3% (Ahrend et.al, 2014). In addition, knowing that there are greater returns to education provides an incentive for further investment in one's education.

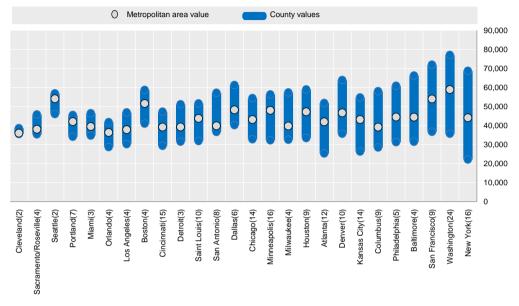
However, the same forces that bring productivity benefits to individuals in metropolitan area may also contribute to greater income inequality among them, calling for complementary measures to support inclusion. While average levels of income may be higher in metropolitan areas, the dispersion of income (wage and total) in them is also generally higher. Metropolitan areas tend to bring together both the highest earners but also workers for many low-skilled jobs (e.g., banking versus cleaning services). Metropolitan areas also tend to attract immigrants, whose skills may be under-valued in the market for various reasons, including lack of qualification recognition. As a result, within a city or metropolitan area, there are often stark inequalities generated by spatial sorting (segregation) that contribute to differences in individuals' ability to access opportunities (Figure 4.5). Higher cost of living in large cities can reduce the higher wage benefits associated with higher productivity, and thus reduce some aspects of wellbeing. Housing segregation by income or social background and poor public transport, in particular, can lock individuals and groups in low-productivity traps.<sup>34</sup> As a result, policies to address inclusion need to consider not only the distribution in income across individuals, but also the disparities generated by segregation according to income level or other socio-economic factors.

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For example, in the Chicago Tri-state metropolitan area, school districts record high school graduation rates range from a low of 57% in the city of Chicago to over 95% in suburban areas (OECD, 2012b). In Aix-Marseille, the share of the working-age population without a diploma ranges from 39% in neighbourhoods in northern Marseille to 14% in Aix-en-Provence (OECD, 2013d). In Puebla-Tlaxcala, Mexico's fourth-largest metropolitan region, peripheral areas exhibit lower education levels than the metropolitan core; in some census tracts, more than 65% of the population has not completed secondary education, compared to incompletion rates of less than 20% in the core (OECD, 2013e).

Figure 4.5. Average household income varies significantly across locations in a metropolitan area





Note: The figure includes the 26 largest American metropolitan areas according to the OECD definition of functional urban areas. Data come from American Community Survey; 2014. Metropolitan areas are ordered by increasing value of the difference between the maximum and the minimum county values. Numbers in parenthesis after the metropolitan area's name indicate the number of counties included in a metro area.

Source: Boulant, J. M. Brezzi, and P. Veneri (forthcoming) "Estimating income levels and inequalities in metropolitan areas: a comparative approach in OECD countries". OECD Regional Development Policy Working Papers.

It is important to consider the impact of structural policies on lagging regions and take appropriate measures when trade-offs emerge. For example, product market regulations in the wholesale and retail trade area appear to have particularly negative impacts on the productivity growth of lagging regions (those farthest from the leading region of the country in terms of GDP per worker levels). Moreover, more rigid employment regulations can hurt the lagging regions more than the leading regions, as lagging regions tend to have smaller (thinner) labour markets with fewer higher-skilled workers and are less able to cope with more rigid labour market regulations (D'Costa et al., 2013). Furthermore, the benefits of structural reforms may require additional measures than the reform itself. For example, reducing the rigidity in employment regulations may not have the desired impacts if there is not sufficient internal mobility within the country or workers in a metropolitan area have a transport impediment to reaching jobs.

To be effective and inclusive, labour markets and skills policies need to take into account the local dimension. Measures to improve information about labour-market conditions, matching, training and/or subsidies to employers tend to be better designed at regional or local level — since information about local conditions can be a crucial factor in their effectiveness. For similar reasons, economy-wide policies aimed at increasing skill levels and reducing skills mismatch are often most effective when adapted to the characteristics of local labour markets. To effectively address regional variations in the supply and demand of skills, local actors need to be equipped with the right tools and resources to develop innovative employment strategies tailored to local conditions. Partnerships are being used across the OECD to better connect local leaders, who can leverage their resources, expertise, and knowledge to develop place-based responses to structural adjustment, local economic development, and productivity. These partnerships require a degree of flexibility in the implementation of national policies to be successful; although, more flexibility at local level should not be pursued at the expense of alignment with national policy goals, efficiency in service delivery and full accountability. 35

In the same vein, policies can boost productivity diffusion across regions by building on regional innovation dynamics. Typically, innovation activity is concentrated in a few regions, generally advanced metropolitan areas, often close to major universities and research centres, which creates a link between innovation and urban/regional development policy. Despite the dramatic changes that ICT has brought to connect individuals and firms, geographic proximity continues to matter in the innovation process. International collaboration for innovation continues to rise, particularly for highly specialised science-based innovation. However, the importance of geographic proximity and face-to-face interaction for innovation persists and, in some cases, has increased. Firms, R&D labs and highly educated workers tend to cluster in particular regions and cities. For instance, venture

A number of different policy mechanisms can allow for greater differentiation in the utilisation of programmes and services locally, while continuing to meet national policy goals. Management by objectives systems can be used to achieve this, notably, by allowing for targets to be negotiated between the central and the local level, with the national level verifying that the sum of all local targets meets national policy goals. Local capacities also need to be considered when granting additional flexibility to local employment and training agencies.

<sup>35</sup> 

capital funds are important for scaling up firm size and the impacts of possible innovations but their investments are notably concentrated in space. Other research explores knowledge spill-overs - knowledge benefits that firms, researchers and other agents receive by being co-located (OECD 2013b). Spill-overs are typically measured by patent citations and the distance decay associated with citations in the same technology areas (i.e. after a particular distance, citations are significantly less likely, commonly found to be within a 150-200 km radius). 36

Regional innovation policies can complement national efforts to strengthen the diffusion of technology and knowledge. The common instruments used to support diffusion include physical infrastructure such as science or technology parks, incubators, or in some cases research infrastructure. More systemic initiatives such as clusters, networks or competence centres, support to specific types of firms (start-ups or existing SMEs) and innovation vouchers or brokerage systems to help firms access consulting services and knowledge are also used (OECD, 2011). The quality and impact of these instruments depends on their design implementation. In some cases, both a national and regional government are active in the same type of instrument. This may be due to duplication or a difference in target groups, with the national policy typically focusing on the high-technology firms/sectors and regional efforts focused on firms further from the productivity frontier. National and regional governments will need to work better together to meet this diffusion challenge. Many countries have therefore put in place tools to better align and co-ordinate innovation diffusion actions across levels of government in this regard, such as national networks of regional development agencies, contracting arrangements, joint financing, and consultation fora.

#### 4.3.2. Spatial policies play a major role in facilitating the efficient allocation of resources in the labour market and improving access to opportunities and essential services.

There is a double dividend for some urban policies in terms of productivity benefits and inclusion objectives. Land use planning and transport, along with housing and commercial development policies, help shape the location decisions of individuals and firms; they play a key role in determining whether and to what extent disadvantaged groups can easily avail themselves of training or labour-market opportunities, access services and amenities. This underscores the role of urban planning and the provision

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Jaffee et. al (1993) pioneered the concept of studying the distance decay between the location of a patent and the location of the citations of that patent in new patent applications

of transport infrastructure in facilitating labour market matching: these are highly complementary policy fields that, if not well co-ordinated, can both hurt productivity and inclusion, in terms of income and wider measures of well-being. If housing policy gives incentives for workers to live far from jobs and public transport systems are not adapted, there is an increase in individual transport likely to generate more congestion, pollution, and higher commuting costs that reduce productivity and well-being.

Providing accessibility to efficient and affordable transport systems helps determine the size of the effective labour market and thus can contribute to both productivity and inclusion. The time and monetary costs of public transport influence the distance at which workers can readily reach jobs. The larger the labour market, the greater the opportunity for more optimal job matching. However, public transport policy does not always reflect that fact, with many public transport services failing to offer equal access to all parts of a metropolitan area.

Rural areas generally experience a higher cost for offering the same degree of services relative to cities, with different solutions to help reduce this service gap. Amongst other things, provision challenges typically include a lack of economies of scale, higher travel costs to reach the service, greater periods of unproductive time, and greater communications costs. Many countries and regions have identified strategies for overcoming these challenges, such as: IT-based solutions; mobile service delivery consolidation, co-location or merging similar services; alternative service delivery mechanisms; and bringing services to users.

# 4.3.3. Systems that govern metropolitan regions can either support or hamper productivity and inclusion

Administrative fragmentation within regions can hurt productivity and inclusion, but metropolitan governance and rural-urban partnerships can help overcome these challenges. Co-ordination across municipalities or regions can be used to improve the cost-effectiveness of public services, the quality of those services, and coherence of overall planning, among other rationales. The need for inter-municipal co-operation is often particularly acute in large metropolitan areas.<sup>37</sup> A lack of co-ordination across such a large number of jurisdictions reduces the magnitude of agglomeration benefits such as productivity (Figure 4.6). The fragmentation penalty, when

within their boundaries. See OECD Metropolitan Database.

37

The metropolitan area of Paris, which consists of 1,375 municipalities, might be an extreme case, but out of 275 OECD metropolitan areas, more than 200 metro areas contain more than 10 local governments and over 60 contain more than 100

comparing a metro area that is twice as fragmented in terms of the number of municipalities than another one, is around 6%. That fragmentation penalty is halved when the metropolitan area has a governance body (Ahrend, Gamper and Schumann, 2014). Many countries have, or are putting in place, metropolitan governance arrangements, which typically focus on regional development, transport and spatial planning (Ahrend et al, 2014). It should be noted that a given level of municipal fragmentation has a greater negative impact on growth in urban regions due to the greater density of interactions than in rural areas (Bartolini, 2015). Nevertheless, there are many reasons to promote rural-urban partnership arrangements for economic, environmental or public services purposes.

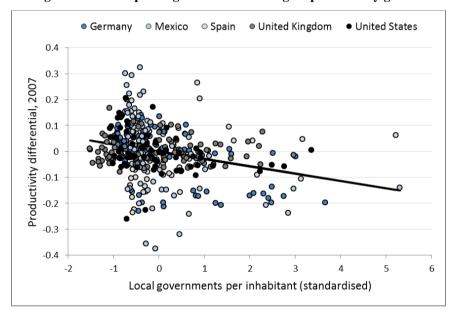


Figure 4.6 Municipal fragmentation is a drag on productivity growth

Fragmentation is the number of municipalities per 100,000 inhabitants. Productivity differential refers to the wage premium of workers controlling for individual characteristics.

Source: Ahrend et al., 2014

#### 4.4 Improving public governance to ensure better policy coherence and efficiency

Achieving Inclusive Growth may require changes to the policy making process and the conduct of public governance. Countries vary in their experience and success in designing and implementing policy packages that require the different government departments, agencies and ministries to work together to achieve shared goals and deliver joined-up outcomes. Some countries have established modes of communication and accountability that need little or no adjustments, while others may need to work hard to create such modes.

#### 4.4.1 Government capacity for joined up action.

Delivering multidimensional outcomes starts with setting a vision that charts the way and helps align the public sector, but also the society at large around shared goals. Such a vision requires a whole-of-government approach that begins with a strong, compelling narrative of what the challenges and opportunities are, and what the desired outcomes should be.

Several mechanisms can also help reinforce governments' capacity to design and implement more balanced, mutually-reinforcing, policy packages (OECD 2015g). The success of multidimensional policy packages depend on the ability of government to align action across sectors and administrative organisations (e.g. centre of government) to deliver joined-up outcomes. A range of mechanisms can be used to help align government action behind the shared goal of productivity and inclusiveness. First, in terms of policy design, ex ante impact and assessments can address distributional concerns. Second, key policy objectives must be accompanied by both technical capacity and political capital to monitor implementation. In addition, specific tools such as the monitoring of performance, the management of the senior executives in the civil service towards the achievement of broad policy outcomes, and policy evaluation can all help to strengthen policy design.

Such an approach also requires multidimensional policy impact assessments. Conventional analysis looks at the effects of policies on selected outcomes separately. Instead, attention to multidimensionality and distributional considerations addressing the productivity-Inclusiveness nexus requires a broader approach to the evaluation of policy impacts. Governments can use a variety of instruments, including regulatory impact assessments (RIA), forecasting or cost-benefit analysis, and short and longer-term goals, including sectorial and/or regional strategies and medium-term expenditure frameworks. Further analysis on the interaction of policies is needed to better guide these approaches. These tools clarify the effects and the trade-offs of government actions for decision-makers and stakeholders alike and - when used systematically - provide strong levers for governments to identify and target social inclusiveness goals. Governments will also need to focus on the impact polices will have on different social groups. Multi-level analysis guided by empirical analysis using micro-data that allow place-based, income-based, and gender-based considerations that may drive inequalities should be conducted. Governments should also strive to ensure more inclusive engagement mechanisms to integrate feedback on policies in the design, implementation, and assessment phases.

#### 4.4.2. Institutional structures need further reinforcing.

Strong institutions are needed to foster balanced development to push the productivity frontier and reduce opportunities for corruption and rentseeking activities. Good public governance is vital for social cohesion. public expenditure efficiency and prevention of corruption. In turn, integrity in public governance ensures that public policies are designed in the public interest and that redistribution policies actually reach their target populations. Corrupt practices create barriers to markets, trade and politics, enforce cartels, and are instrumental in vested interests capturing political and administrative decision-making processes for narrow benefits, harming the public interest. When rents accrue to elites only, few incentives are provided for regular businesses to thrive and to invest into productivityenhancing activities. Vested interests in the status quo are also likely to oppose reforms towards more openness and inclusiveness. At another level, corruption in the public administration can lead to the exclusion of parts of the population from basic public services. In a number of developing countries, evidence has shown that overall corruption can fuel inequality as elites use corruption to maintain their power and interests (You & Khagram, 2005), and because access to markets and public services are restrained and disadvantages perpetuated (Gupta et al. 2002). There is empirical evidence of the negative impact of corruption on sustainable development at large (Aidt, 2011) and on productivity (Lambsdorff, 2004 and Salinas and Salinas, 2007). Besides corruption, activities such as lobbying have the scope to create policy bias and have been found to limit the diffusion of productivity gains (Aghion et al. 2015).

Governments also need to avoid policy capture. A situation in which the interests of one narrow group dominates the interests of all the other stakeholders to the benefit of that narrow group, can lead to the erosion of democratic governance, and undermine productivity, economic growth and social cohesion and increase inequality of opportunities. Policy areas that involve large volume of fiscal spending such as infrastructure and urban planning are particularly vulnerable to the risks of capture. Policy capture can result from a lack of inclusiveness in stakeholder engagement processes. unregulated lobbying, conflicts of interests for public officials, and inadequately regulated financing of political parties and election campaigns as highlighted in the report on Financing Democracy (OECD, 2016d). Securing unbiased and inclusive policy making requires greater reliance on evidence-based policy and regulation-making, better transparency and inclusiveness in engaging with stakeholders as part of the policy-making process, increasing transparency and integrity in lobbying, better management of conflicts of interest, and balanced political finance.

The OECD provides policy options and tools to strengthen the rule of law, reduce corruption and secure the public interest in decision-making. The OECD has a series of recommendations and guidelines<sup>38</sup> aimed at strengthening an overall institutional framework so that decisions defining policy needs are not skewed towards inefficient and unnecessary projects that only benefit a few, that draft regulations reflect public interest and not the interest of a particular industry (OECD 2015h), that access to public services and justice is granted to everybody equally, and that the criteria to award contracts when procuring goods and services is value for money and not connections or bribes

#### 4.4.3. Better international cooperation is needed.

Another challenge for policy makers is the need for stronger and better international policy cooperation. While the BEPS is a case in point, as pointed in the sections above better coordination is also called for in the areas of product market regulation and innovation. In particular the impact of policies for innovation depends heavily on their governance and implementation (OECD, 2015i). For instance as pointed in section 3 the global nature of frontier firms implies that to provide a level playing field R&D fiscal incentives and intellectual property rights regimes may need to be better coordinated at the international level. In the same way more joined-up work on cross-border cases could make competition law more effective and improve enforcement against global enterprises that violate competition laws. The newly-created OECD Global Forum on Productivity could both help to better understand the benefits of co-ordination in different areas, as well as facilitate co-ordinated strategies across Member countries.

Service [C(2003)107].

38

See, for example, the Recommendation of the Council on Principles for Transparency and Integrity in Lobbying [C(2010)16] and the Recommendation of the Council on OECD Guidelines for Managing Conflict of Interest in the Public

#### References

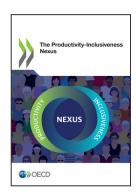
- Adalet McGowan, M. and D. Andrews (2015a), "Labour Market Mismatch and Labour Productivity: Evidence from PIAAC Data", OECD Economics Department Working Papers, OECD Publishing, Paris, No. 1209.
- Adalet McGowan, M. and D. Andrews (2015b), "Skill Mismatch and Public Policy in OECD Countries", OECD Economics Department Working Papers, OECD Economics Department Working Papers, No. 1210, OECD Publishing, Paris, http://dx.doi.org/10.1787/5js1pzw9lnwk-en.
- Adema, W., C. Clarke et V. Frey (2015), « Paid Parental Leave: Lessons from OECD Countries and Selected U.S. States », OECD Social, Employment and Migration Working Papers, No. 172, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrggvggb4vb-en.
- Aghion et al. Innovation and Top Income Inequality (June, 2015), http://www.ucl.ac.uk/~uctp39a/innovation and top income inequality.p df
- Ahrend, R., C. Gamper and A. Schumann (2014), "The OECD Metropolitan Governance Survey: A Quantitative Description of Governance Structures in large Urban Agglomerations", OECD Regional Development Working Papers, No. 2014/04, OECD Publishing, Paris
- Aidt, T. S. (2011). 1 Corruption and sustainable development. International Handbook on the Economics of Corruption, 1.
- Albrizio, S., Botta, E., Koźluk, T., & Zipperer, V. (2014). (2014), "Do Environmental Policies Matter for Productivity Growth?, Insights from New Cross-Country Measures of Environmental Policies", OECD Economics Department Working Papers, No. 1176, OECD Publishing, Paris.
- Atkinson, A. and F. Messy (2015), "Financial Education for Migrants and their Families", OECD Working Papers on Finance, Insurance and Private Pensions, No. 38, OECD Publishing, Paris
- Atkinson, A. and F. Messy (2013), "Promoting Financial Inclusion through OECD/INFE Evidence, Financial Education: **Policies** Practice", OECD Working Papers on Finance, Insurance and Private No. 34. OECD Publishing, Paris. Pensions. DOI: http://dx.doi.org/10.1787/5k3xz6m88smp-en.
- Bartolini, D. (2015), "Municipal Fragmentation and Economic Performance of OECD TL2 Regions", OECD Regional Development Working Papers,

- No. 2015/02, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/5jrxqs60st5h-en
- Boulant, J. M. Brezzi, and P. Veneri (2016, forthcoming) "Estimating income levels and inequalities in metropolitan areas: a comparative approach in OECD countries". OECD Regional Development Policy Working Papers.
- Braconier, H, Nicoletti, G. and B. Westmore (2014), "Policies challenges for the Next 50 Years", OECD Economics Department Policy Papers, No 9, OECD Publishing.
- Calvino et al. (2016), "No Country for Young Firms: Start-Up Dynamics and National Policies", STI Policy Paper, OECD Publishing, Paris.
- Carlino, G. and W. Kerr (2014), Agglomeration and Innovation, Harvard Business School Working Paper 15-007, August 5, 2014.
- Cedefop (2015). Job-related adult learning and continuing vocational training in Europe: a statistical picture. Luxembourg: Publications Office. Cedefop research paper; No 48. http://dx.doi.org/10.2801/392276 OECD
- Cockburn, I.M., M.J. MacGarvie and E. Muller (2009), "Patent Thickets, Licensing and Innovative Performance", ZEW Discussion Paper, No. 08-101.
- Colchero et al. (2016), Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study, BMJ 2016;352:h6704 http://dx.doi.org/10.1136/bmj.h6704.
- D'Costa, S., E. Garcilazo and J. Oliveira Martins (2013), "The Impact of Structural and Macroeconomic Factors on Regional Growth", OECD Regional Development Working Papers,2013/11, OECD Publishing. http://dx.doi.org/10.1787/5k451mplq9lw-en
- Del Mar Salinas-Jiménez, M., & Salinas-Jiménez, J. (2007). Corruption, efficiency and productivity in OECD countries. Journal of Policy Modeling, 29(6), 903-915.
- Duranton, G. and D. Puga (2004), "Micro-foundations of urban agglomeration economies," Handbook of Regional and Urban Economics, in: Henderson, J.V. and J.F. Thisse (eds.), Handbook of Regional and Urban Economics, Vol. 4, Ch. 48, pp 2063-2117.
- Flammer, C. (2013), Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach, University of Western Ontario. Fleurbaey, M. and D. Blanchet (2013). Beyond GDP. Princeton University Press

- Gupta, S., Davoodi, H. and Alonso-Terme, R. (2002): Does Corruption Affect Income Inequality and Poverty?, Economics of Governance, Vol. 3, pp. 23-45.
- James C, Devaux M, Marechal C, Sassi F. Inclusive growth and health. OECD Employment, Labour and Social Affairs Health Division Committee Paper.
- Jaffe, A., M. Trajtenberg and R. Henderson, (1993) "Geographic Localization of Knowledge Spill-overs as Evidenced by Patent Citations", The Quarterly Journal of Economics 108 (3) 1993: 577-598.
- Johnstone, Nick et al (2015), "Environmental Policy Design, Innovation and Efficiency Gains in Electricity Generation" OECD Environment Working Paper.
- Lambsdorff, J. G., Taube, M., & Schramm, M. (2004), The new institutional economics of corruption. Routledge.
- OECD (2016a, forthcoming), Perspectives on Innovation and Inclusive Growth, OECD, Paris,
- OECD (2016b, forthcoming), Getting Skills Right: Assessing and Anticipating Changing Skills Needs
- OECD (2016c), OECD Reviews of Health Care Quality: United Kingdom Raising Standards, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264239487-en.
- OECD. (2016d), Financing Democracy: Funding of Political Parties and Election Campaigns and the Risk of Policy Capture, OECD Public Reviews. OECD Governance Publishing, Paris. DOI: http://dx.doi.org/10.1787/9789264249455-en
- OECD (2015a), In It Together: Why Less Inequality Benefits All, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264235120-en
- OECD (2015b), OECD Employment Outlook 2015, OECD Publishing
- OECD, (2015c), Tackling harmful alcohol use: economics and public health policies. OECD, Paris.
- OECD (2015d), Fit Mind, Fit Job: From Evidence to Practice in Mental Health and Work, Mental Health and Work, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264228283-en.
- OECD (2015e) Skills and Learning Strategies for Innovation in SMEs, OECD Centre for Entrepreneurship, SMEs and Local Development, Paris

- OECD (2015f) Estonia and Finland, Fostering Strategic Capacity across governments and digital services and borders.
- OECD (2015g) Policy Shaping and Policy Making, the Governance of Inclusive Growth
- OECD (2015h) Recommendation of the OECD council on Quality Regulation.
- OECD (2015i), The Innovation Imperative Contributing to Productivity, Growth and Wellbeing
- G20/OECD High-Level Principles on SME Financing (2015), OECD Publishing, Paris, http://www.oecd.org/finance/G20-OECD-High-Level-%20Principles-on-SME-Financing.pdf.
- OECD. (2014a), PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science, PISA, OECDPublishing, Paris. DOI: http://dx.doi.org/10.1787/9789264208780-en
- OECD (2014b), Financial Literacy Skills for the 21st Century, Volume VI, OECD Publishing, Paris.
- OECD (2014c), Financial Education for Youth: The Role of Schools, OECD **Publishing**
- OECD, (2013a) Skills Development and Training in SMEs, OECD Publishing, Paris.
- OECD (2013b), Supporting Investment in Knowledge Capital, Growth and Innovation, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264193307-en
- OECD (2013c), Women and Financial Education: Evidence, Policy Responses and Guidance, OECD Publishing
- OECD (2013d), Vers une Croissance Plus Inclusive de la Métropole Aix-Marseille: Une Perspective Internationale, OECD Publishing, Paris.
- OECD. (2013e), OECD Territorial Reviews: Puebla-Tlaxcala, Mexico 2013, OECD Publishing, Paris. DOI http://dx.doi.org/10.1787/9789264203464-en
- OECD (2012a), Meeting Global Challenges through Better Governance: International Co-operation in Science, Technology and Innovation, OECD Publishing, Paris.OECD. (2012b), OECD Territorial Reviews: The Chicago Tri-State Metropolitan Area, United States 2012, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/9789264170315-en

- OECD (2011) Intellectual Assets and Innovation: The SME Dimension, OECD Publishing, Paris
- OECD (2010a), "Institutional and Policy Determinants of Labour Market Flows", OECD Employment Outlook.
- OECD, (2010b), Obesity and the Economics of Prevention: Fit not Fat, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264084865-en.
- OECD/INFE (2012), OECD/INFE High-Level Principles on National Financial Education, OECD Publishing, Strategies for http://www.oecd.org/finance/financialeducation/OECD INFE High Level Principles National Strategies Fi nancial Education APEC.pdf
- OECD/INFE(2015) Financial Education National Strategies for OECD/INFE Policy Handbook.
- Lorenz, N. and Potter, J. (2016, forthcoming) Skills and Learning Strategies for Innovation in SMEs, OECD Employment Policy Paper 12, OECD Publishing, Paris.
- Thévenon, Olivier (2015), "Do 'institutional complementarities' Foster Female Labour Force Participation?" Journal of Institutional Economics.
- Sassi F, 2010, Obesity and the Economics of Prevention, Fit not Fat, OECD Publishing, Paris
- WHO (2015), Using Price Policies to Promote Healthier Diets, World Health Organization, Denmark. http://www.euro.who.int/ data/assets/pdf file/0008/273662/Usingprice-policies-to-promote-healthier-diets.pdf.
- WHO (2009), Interventions on Diet and Physical Activity: What Works -Organization. Summary Report, World Health Geneva, http://www.who.int/dietphysicalactivity/summary-report-09.pdf.
- You, J., and S. Khagram (2005), A Comparative Study of Inequality and Corruption, American Sociological Review 2005, Vol. 70 (February: 136–157)



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