Executive summary

New sources of growth are urgently needed to help the world move to a stronger, more inclusive and sustainable growth path following the financial crisis. Innovation – which involves the creation and diffusion of new products, processes and methods – can be a critical part of the solution. While not a goal in itself, innovation provides the foundation for new businesses, new jobs and productivity growth and is thus an important driver of economic growth and development. Innovation can help address pressing social and global challenges, including demographic shifts, resource scarcity and the changing climate. Moreover, innovation can help address these challenges at the lowest cost. Innovative economies are more productive, more resilient, more adaptable to change and better able to support higher living standards.

Harnessing innovation requires policies that reflect the realities of innovation as it occurs today. Innovation goes beyond science and technology, and involves investments in a wide range of knowledge-based assets that extend beyond research and development (R&D). Social and organisational innovations, including new business models, are increasingly important to complement technological innovation. Innovation also involves a wide and expanding range of actors, including firms, entrepreneurs, foundations and non-profit organisations, universities, scientific institutes, public sector agencies, citizens, and consumers, often working in close collaboration. Innovation also has a strong and ever-expanding basis in the digital economy, facilitated by the growth of mobile telecommunications, the convergence of voice, video and data to the Internet, and the rapid uptake of data and sensors (the Internet of Things). Moreover, it involves a growing role of emerging economies, in particular the People's Republic of China (hereafter: China), which recently passed the European Union in becoming the second-largest funder of R&D behind the United States. This is leading to an increasingly global context, with innovation drawing on knowledge and ideas from across the world, though still often rooted in unique local and regional strengths.

Governments play a key role in fostering a sound environment for innovation, in investing in the foundations for innovation, in helping overcome certain barriers to innovation, and in ensuring that innovation contributes to key goals of public policy. Getting the policy mix right can help governments in shaping and strengthening the contribution that innovation makes to economic performance and social welfare. These *policies for innovation* are much broader than the policies that are often seen as "innovation policies" in a narrow sense – such as policies to support business R&D, financing for risk capital, etc. Such policies for innovation need to be focused on enhancing the performance of the system as a whole, as weak links in the system will hinder its performance. The priority assigned to different elements will depend on the nature and state of their system

of innovation: one size clearly does not fit all. OECD analysis suggests that innovation thrives in an environment characterised by the following features, all of which are explored in detail in the OECD Innovation Strategy 2015:

- A skilled workforce that can generate new ideas and technologies, bring them to the market, and implement them in the workplace, and that is able to adapt to technological and structural changes across society.
- A sound **business environment** that encourages investment in technology and in knowledge-based capital, that enables innovative firms to experiment with new ideas, technologies and business models, and that helps them to grow, increase their market share and reach scale.
- A strong and efficient system for knowledge creation and diffusion that invests in the systematic pursuit of fundamental knowledge, and that diffuses this knowledge throughout society through a range of mechanisms, including human resources, technology transfer and the establishment of knowledge markets.
- Policies that encourage innovation and entrepreneurial activity. More specific innovation policies are often needed to tackle a range of barriers to innovation. Many of these actions include policies at the regional or local level. Moreover, well-informed, engaged and skilled consumers are increasingly important for innovation.
- A strong focus on governance and implementation. The impact of policies for innovation depends heavily on their governance and implementation, including the trust in government action and the commitment to learn from experience. Evaluation of policies needs to be embedded into the process, and should not be an afterthought.

Out of this broad toolbox for innovation policy, five priorities are particularly important and together provide the basis for a comprehensive and action-oriented approach to innovation, much of which can also be applied in the context of fiscally constrained economies. These priorities are:

- 1. Strengthen investment in innovation and foster business dynamism. Governments need to develop better policies to support investment in knowledge-based capital, which is now currently the largest area of business investment. They also should foster the growth of young and innovative small and medium-sized enterprises that remain constrained in their impact on growth and jobs, partly because some of our policies still tend to focus on incumbents.
- 2. Invest in, and shape, an efficient system of knowledge creation and diffusion. Investment in basic research remains a key priority; most of the key technologies in use today have their roots in public research. There is a risk that public investments in this area become too focused on the short term, rather than the long-term benefits. More efficient innovation policies, based on international good practice, can help strengthen the impact of government action.
- **3. Seize the benefits of the digital economy.** Digital technologies continue to offer a large potential for innovation and growth. However, policy needs to preserve the open Internet, address privacy concerns, and ensure access and competition. Digitally enabled innovation also requires new infrastructure such as broadband, spectrum and new Internet addresses.

- **4.** Foster talent and skills and optimise their use. Skills are a key challenge for innovation, with two out of three workers not having the skills to succeed in a technology-rich innovation. A broad and inclusive skills strategy is therefore essential for innovation.
- **5. Improve the governance and implementation of policies for innovation.** Finally, the impact of good innovation strategies depends on their governance and implementation, including the trust in government action and the commitment to learn from experience. Evaluation needs to be embedded into the process, and should not be an afterthought.

Implementing an effective government strategy for innovation is particularly important as key trends – the spread of global value chains, the increasing importance and mainstreaming of knowledge-based capital, and rapid technological progress, including the rise of the digital economy – are leading to the emergence of a "next production revolution". In the current context of a weak global recovery, business and policy leaders need to take advantage of these trends to accelerate structural shifts towards a stronger, inclusive and more sustainable economic future that creates new jobs and opportunities.



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