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**PRO-PRODUCTIVITY INSTITUTIONS – A REVIEW OF
ANALYSIS AND POLICY RECOMMENDATIONS**

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Outline

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1. THE ROLE OF PRO-PRODUCTIVITY INSTITUTIONS

Pro-productivity institutions: The basics

- **Mission:** explore drivers of productivity growth and provide advice on pro-productivity policies; typically set up by government
- **History:** several set up after WWII in context of Marshall plan, many also in Asian countries, typically focused on advice to business on productivity
- **The development of policy-focused PPIs in OECD countries:**
 - Australia's Productivity Commission first **policy-focused** PPI, officially since 1998
 - Several set up in previous decade reflecting growing interest in productivity, e.g. Chile (2015), Denmark (2012), Mexico (2013), New Zealand (2011) and Norway (2014)
 - New impetus for boards at EU level following Council decision (2016) – recommended boards for Eurozone countries, suggested boards also for other EU countries.
 - UK Productivity Commission established in 2021.
- **Now some 20 plus productivity commissions in OECD countries;** with more still being established - **Austria** (2022), Sweden (expected in 2023), Italy?
- **Cooperation** in EU context and through OECD Global Forum on Productivity

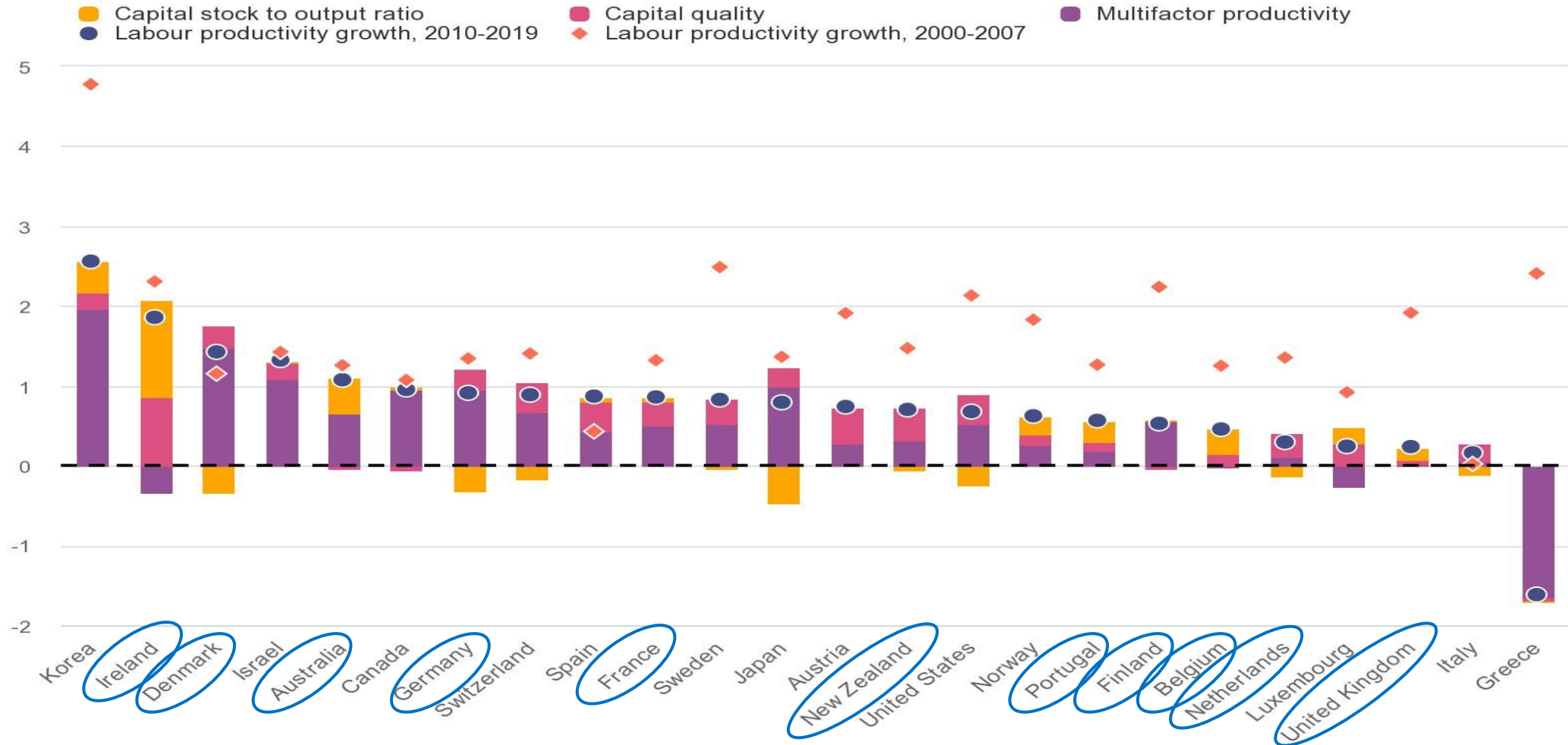
Table 1: Overview of the Productivity Boards Reviewed in this Presentation

Institution	Established	Type & membership	Mission	Location and reporting
Australia	1998	Standing inquiry body	Promoting productivity-enhancing reforms	Independent, reports to executive and Parliament
Belgium	2019	Independent advisory body, multi-stakeholder	Examine productivity and competitiveness	Independent structure, reports to trade unions and employer's organisations
Denmark	2017*	Independent economic advisory body (academic)	Analyse productivity and competitiveness	Independent, provides advice to Danish policy makers
Finland	2021**	Independent expert body (academic & government)	Evaluate productivity and competitiveness	Independent expert body linked to Ministry of Finance , reports to government
France	2018**	Independent advisory body of academic economists	Analyse productivity and competitiveness	Independent, non-partisan body reporting to Prime Minister and Minister of Finance.
Germany	2019*	Independent academic advisory body	Analyse productivity and competitiveness	Independent, provides advice to German policy makers
Ireland	2018*	Independent council, multi-stakeholder	Analyse productivity and competitiveness	Independent council, reports to prime minister and government
Netherlands	2017**	Independent economic research agency (government)	Understand drivers productivity growth	Independent agency, part of Ministry of Economic Affairs and Climate Policy
New Zealand	2011	Standing inquiry body	Improved wellbeing, improved productivity	Independent, reports to Parliament
Portugal	2018**	Joint temporary structure (government)	Monitoring policies on productivity	Joint economic structure of Ministry of Finance and Ministry of Economy
United Kingdom	2021	Independent body, established by NIESR and TPI (academic)	Understand productivity, provide policy advice	Body operating independently of government, working closely with policy makers

The context: a marked slowdown in productivity growth ...

Contributions to labour productivity growth, 2010-2019

Total economy, percentage change at annual rate



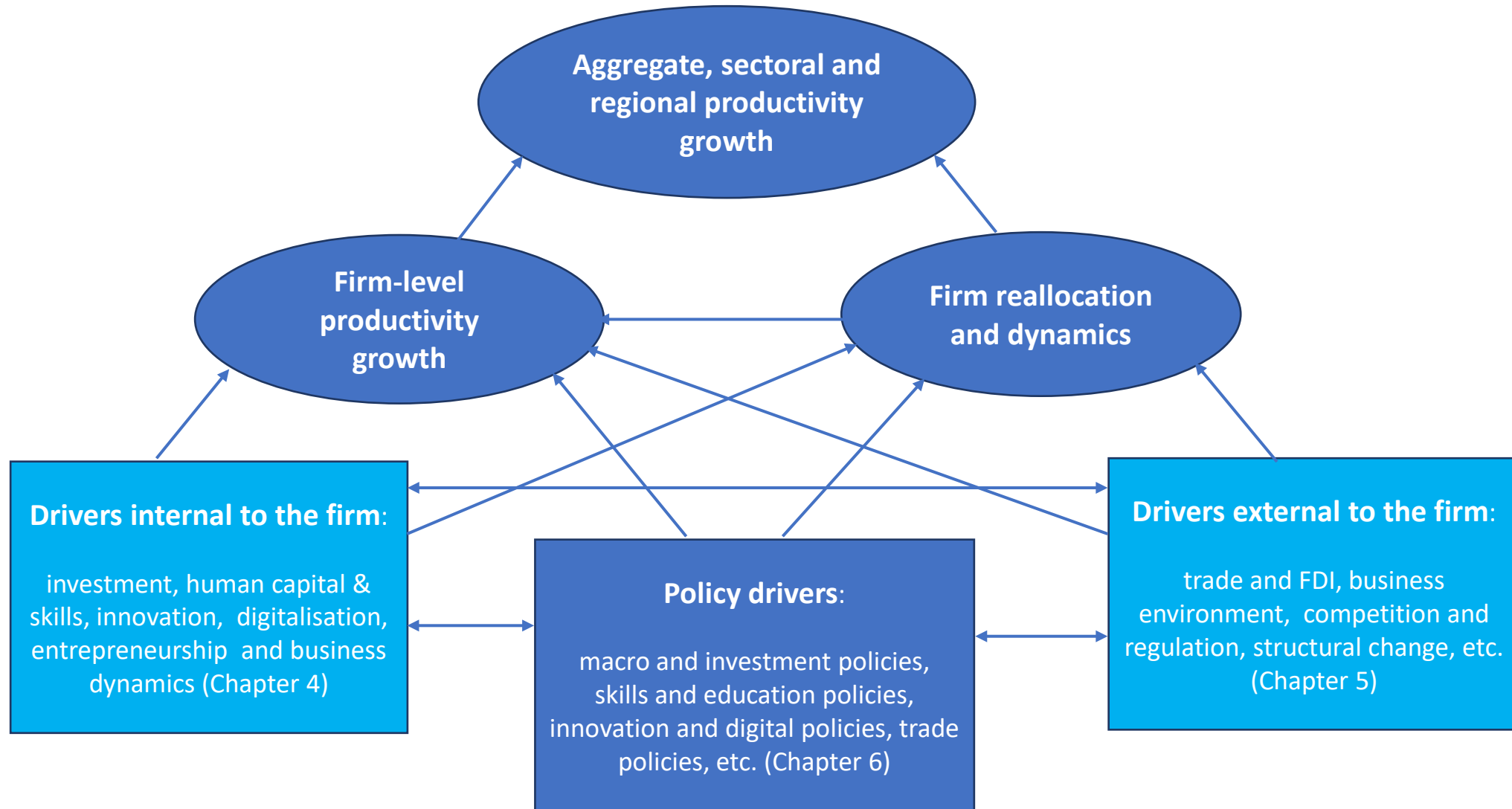
Source: OECD (2021), Compendium of Productivity Indicators 2021.

... with potentially a wide range of contributing factors

- **General factors that may have contributed to the slowdown, such as:**
 - Slowdown in **investment** and capital formation
 - An apparent slowdown in the rate of **technological progress**
 - **Structural changes**, i.e. a shift from manufacturing to services
 - A slowdown in the pace of **diffusion** from leaders to followers, reflecting a growing productivity divergence
 - Growing **complementarity of investments** in intangibles (e.g. organizational change) and tangibles (machinery, equipment, buildings)
 - **Demographic** factors affecting the workforce, investment and start-ups (e.g. Germany)
 - Cyclical factors
- **Other factors (specific to national circumstances), such as:**
 - Lack of **skills** and growing skills mismatch (e.g. France, Portugal)
 - Quality of **management** (e.g. France)
 - Gap in **innovation and ICT uptake** (e.g. France, Portugal)
 - **Flexibility** in labour and product markets (e.g. Portugal)

2. WITHIN-FIRM DRIVERS OF PRODUCTIVITY; ANALYSIS AND POLICIES

Framing the discussion on productivity



Source: Based on Albrizio and Nicoletti (2016).

Within-firm drivers of productivity

- **Examines drivers that (mostly) directly affect production factors within the firm and policies relating to those drivers:**
 - Investment in tangible and intangible capital
 - Human capital, skills, including management skills
 - Innovation and digitalisation
 - Entrepreneurship and the creation, growth and exit of firms (or business dynamics)

Investment – Examples of Analysis and Policies

	Analysis and findings	Selective policy recommendations
Overall investment	<ul style="list-style-type: none"> • Structural changes reduced investment • Business investment not responsive to declining cost of capital (Australia) • Dampening impact on investment of pressures for self-reliance (Australia) • Complementarity structural reforms • High interest rates, high cost of capital, low wages lowered capital intensity (New Zealand) • Uncertainty, financial constraints, interest rates; positive: reduced debt levels (Portugal) • Economic uncertainty, labour markets, lack of growth finance, overall business environment (UK) 	<ul style="list-style-type: none"> • Sound fiscal policy: scope for public investment • Efficient public spending • Competitive tax system – tax breaks to reduce cost of capital (UK) • Reliable business & regulatory environment • Public-private partnerships • Attractiveness to foreign direct investment
Specific areas of investment	<ul style="list-style-type: none"> • Rigorous assessment public investment • Infrastructure, green transition, R&D & intangibles • Targeted support for SMEs only justified in presence of strong market failures (Denmark) • Lack of equity financing (Germany) • Public investment as catalyst for private investment (Belgium, UK) • Housing investment & competitiveness (Ireland) 	<ul style="list-style-type: none"> • Support for public bodies in evaluating, planning and managing public investments (Ireland) • Tax allowance for corporate equity (Germany) • Improvements in planning, incl. resources (Ireland)

Human Capital – Examples of Analysis and Policies

	Analysis and findings	Selective policy recommendations
General education & skills	<ul style="list-style-type: none"> • Many workers have low basic skills (e.g. literacy) • Ageing populations – talent is key • Education system does not lower inequalities (France) • 50% slowdown explained by human capital (France) 	<ul style="list-style-type: none"> • Improvement in school productivity (Australia) • Reform of tertiary education (Australia) • Improved quality initial education and reduced inequalities (France)
Specific skills	<ul style="list-style-type: none"> • Digital transformation (telework) requires new skills • Quality of management affects productivity (Finland) • Less efficient in management than production (France) • Need for cognitive and non-cognitive skills (autonomy) 	<ul style="list-style-type: none"> • Support for development of soft skills (France); Digital skills, including AI (Ireland); Managerial skills in SMEs, green skills (Ireland); Skills for Innovation and leadership (New Zealand)
Life-long learning	<ul style="list-style-type: none"> • Lack of focus on life-long learning & vocational skills 	<ul style="list-style-type: none"> • Comprehensive approach (supply/demand) needed (Belgium) • Development modern apprenticeships (Ireland)
Attractiveness to talent	<ul style="list-style-type: none"> • Foreign labour increases access to knowledge, improves skills use, supports reallocation, but possible negative impacts on wages domestic workers (Denmark) 	<ul style="list-style-type: none"> • Reforms to eligibility, fast-track (Denmark) • Employment policies for refugees (Denmark) • Review of migration policies; reduce inflows of low-skilled labour (New Zealand)
Skills mismatch	<ul style="list-style-type: none"> • COVID crisis increased skills mismatch (Belgium) • Significant skills mismatch • Half of productivity gap frontier firms and laggards explained by human capital (France) 	<ul style="list-style-type: none"> • Improvements in agility of skills system • Incentives for reskilling and upskilling • Strengthening of links business-university • Training to support inter-sectoral mobility

Innovation and Digitalisation – Examples of Analysis and Policies

	Analysis and findings	Selective policy recommendations
Private R&D	<ul style="list-style-type: none"> • Tax exemptions help increase R&D (Belgium) • Sharp decline in R&D due to fall Nokia (Finland) • Low share of industry lowers R&D (France) • High concentration of R&D in large firms (Germany) • R&D tax credits effective, esp. for SMEs (Portugal) 	<ul style="list-style-type: none"> • Reform of R&D tax credits scheme (Portugal) • Evaluation R&D tax credits (Denmark, NWZL) • Direct support for R&D (Finland) • Improved incentives for SMEs (Germany) • Innovative public procurement (Germany, NWZL)
Innovation system	<ul style="list-style-type: none"> • Diffusion key, innovation only 2% firms (Australia) • High concentration of innovation (Belgium) • Past policies for focused innovation have lacked scale, resources and durability (New Zealand) • Collaboration important for innovation (UK) 	<ul style="list-style-type: none"> • Development of focused innovation policy to complement broader policies (New Zealand) • Networking & collaboration (Finland, UK, NWZL) • Diffusion in non-market services (Australia) • Better links to foreign firms (Australia)
Productivity & costs R&D	<ul style="list-style-type: none"> • Productivity of R&D has declined (Finland) • Growing complexity R&D increasing costs (Germany) 	<ul style="list-style-type: none"> • No specific policy recommendations
Telework	<ul style="list-style-type: none"> • Remote working increases productivity (Ireland) • Potential for increased productivity (France, UK) 	<ul style="list-style-type: none"> • Infrastructure funding for remote areas (AUS) • Use momentum COVID – infrastructure (Belgium)
Advanced technology use	<ul style="list-style-type: none"> • Lag in uptake relative to leaders (France/Germany) • Low use advanced technologies (Australia, Ireland) • Complementarity digital & intangibles (Portugal) 	<ul style="list-style-type: none"> • Investment in digital infrastructure (Germany) • Digitalisation public services (Germany) • Competition in the platform economy (Germany)
Data	<ul style="list-style-type: none"> • Lagging in data analytics and AI (Australia) • Growing role data for value creation (Germany) • Importance of platforms and cloud (Germany) 	<ul style="list-style-type: none"> • Enhanced access to public data (Australia) • Enhanced access and sharing of data (Germany) • Data interoperability and portability (Germany)

Entrepreneurship and Business Dynamics – Examples of Analysis and Policies

	Analysis and findings	Selective policy recommendations
Entry, exit & creative destruction	<ul style="list-style-type: none"> No decline in business dynamics (Finland) Low start-up rate (Belgium, Germany) Slow population growth affects entry (Germany) Churn of firms has declined (Netherlands) 	<ul style="list-style-type: none"> Remove exit barriers for unviable firms (Belgium) Reform housing and regional policies (Finland) Remove market access barriers (Germany) Reform insolvency & restructuring laws (Germany)
Frontier firms	<ul style="list-style-type: none"> Country has several global leaders (Belgium) Country lacks high-productivity firms (Finland) Slowdown greatest at frontier (France) Fixed costs of regulation benefit leaders (Germany) Productivity levels leaders lagging (New Zealand) Productivity gap concentrated in leaders (UK) 	<ul style="list-style-type: none"> Incentives for young innovative firms (Belgium) Improve funding for young firms, skills and management for SMEs (Finland)
Resource allocation	<ul style="list-style-type: none"> Most productive firms too small (Belgium, Finland) Lower in ICT and import-intensive sectors (France) Most resources going to productive firms (UK) 	<ul style="list-style-type: none"> Improved & targeted support policies (Germany)
COVID & business dynamics	<ul style="list-style-type: none"> Support policies entrench structure (Denmark) Risks to business dynamism (France) Business dynamism low in COVID crisis (Germany) Risk of zombie firms (Belgium, Portugal) 	<ul style="list-style-type: none"> Targeted support in crisis situations (Denmark) Unwinding of business support policies (France)
Productivity divergence & diffusion	<ul style="list-style-type: none"> No evidence of divergence (Netherlands) Unlike in Europe, lagging firms don't benefit from foreign technologies (New Zealand) 	

Summary points on within-firm drivers and policies

- Considering its importance, relatively **little attention** to policies to address slowdown in aggregate **investment** – is this considered a **structural factor**, not easily influenced by national policy? **Macroeconomic policies** affecting investment are covered by only few PPIs, as are **financial markets**. Intangible investment only addressed by a few PPIs.
- **Human capital and skills** are the most widely explored drivers, with a broad range of issues explored, including “new” issues such as management. Its **role for productivity growth appears much more important than suggested by growth accounting**.
- **Innovation and technology** are also explored by many, but with relatively standard policy advice thus far – relatively **little attention to new issues, such as data, AI, targeted/mission-oriented innovation policies**, etc. Also little work & policy advice on **technology diffusion**
- Although a relatively new issue, most PPIs have explored several dimensions of **business dynamics** and **understand its importance for productivity** – the **link to competition** is not yet much explored, though. Also, **little attention to policies linked to frontier firms** compared to policy advice on laggards and “zombie” firms.

3. EXTERNAL DRIVERS OF PRODUCTIVITY: ANALYSIS AND POLICIES

External drivers of productivity

Focused on factors and policies that are (mostly) external to the firm but influence firm productivity, including:

- Trade, foreign direct investment and global value chains
- Business environment, competition and regulation.
- Structural issues and industrial policies
- Regional policies and governance
- Energy and environmental policies
- Social and labour market policies
- Other issues

Trade, FDI and Global Value Chains

Adjust screenings of FDI to avoid dis-incentives for investment. Removal or remaining tariffs for importing firms and enhance engagement in GVCs. Reform policies linked to trade in services (Australia)

Actions at EU level to strengthen position in GVCs and support multilateralism (Belgium)

Reform tax policies to reduce burden on labour and capital and make country more attractive to FDI (France)

Integration in world economy important for productivity growth – multilateral trading system important and avoiding protectionist policies. Need to make country more attractive to FDI. Coordination at EU level important (Germany).

More deliberate approach to attracting FDI, with better link to more focused innovation policies. Need to regularly evaluate trade and development agency (New Zealand)

***Overall, relatively limited issue for EU countries,
larger focus in non-EU countries***

Business environment, competition and regulation

Need to examine specific markets to ensure **contestability** and use regulation, funding, competition laws and regulatory design to improve competition & productivity (**Australia**)

Less effective **competition policies in small market** may have contributed to weakening of business dynamics – need to promote competition, entry & investment (**Finland**)

Strengthen **European competition policy** and lower entry barriers (**Germany**)

Review business costs (e.g. banking, insurance, legal) and explore reforms (**Ireland**)

Inquiry into frontier firms showed need for more **innovation-friendly regulation** – keep up to date, more flexibility (**New Zealand**)

Competition a concern in several countries, some work on specific sectors, relatively little focus on innovation-friendly regulation

Structural issues and industrial policies

Review of support policies linked to COVID crisis – argued for more targeted schemes (with lower deadweight loss) rather than general schemes (*Denmark*)

Intersectoral shifts have affected productivity – developing certain industrial activities (e.g. linked to green innovation) could compensate. Slower development of high-growth sectors as peer countries. Intersectoral shifts require labour mobility (*France*).

Avoid creating national or European champions (*Germany*, 2019)

Industrial policy making affected by short-termism – need more effective institutional frameworks (*UK*)

Overall, relatively limited focus, with no real discussion of industrial policy and few new insights.

Regional policies and governance

Role of **cities in productivity** affected by infrastructure provision and conveyance duties on properties. Recommendation on governance of infrastructure, including funding; use of competition principles for land use policies; removal of stamp duties and introduction land tax (**Australia**).

Differences in productivity between cities and regions affected by regulations, e.g. planning rules and distorted by local tax policies to invest in infrastructure. Better to tax infrastructure use and finance public goods through broad-based taxes (**Denmark**).

Focus on **levelling up and empowerment** of local leadership; address overcentralisation, weak institutions, high degree of policy churn, short-termism and poor coordination (**UK**).

Overall, relatively limited focus, UK focus potentially the broadest

Energy and environmental policies

Least-cost mitigation policies, e.g. broad-based carbon pricing, could help reduce risk to productivity growth. Need for reform of system of tradeable emission rights. Need for efficient adaptation policy too. Reform of electricity market. (*Australia*)

Need for uniform greenhouse (not just CO₂) tax – no reduction requirements and tax rates for individual industries, non-tax measures can reduce level of tax (*Denmark*)

Identify suitable opportunities and technologies for business to reduce emissions; research on interaction between competitiveness and climate change policies – look for synergies (*Ireland*)

Need for long-term commitment; use of emissions pricing to improve price signals; low-emissions research and innovation as priorities, supportive regulation and public investment (*New Zealand*)

Mostly consideration of efficient climate change policies, little about link to productivity or competitiveness thus far

Social and labour market policies

Labour markets:

- Increase participation of under-represented groups, **tap into talent** (Ireland), e.g. through reform tax system, flexible retirement age, etc. (Germany)
- Reform award and bargaining system to increase **flexibility** in labour market (Australia)
- Labour market **segmentation** (Portugal) – considered to affect mobility and incentives for training, and ultimately productivity

Immigration policies:

- Reform of skilled migration system – **enable employee-sponsored** migration (Australia)
- Better options for **job mobility of sponsored migrants** to match skills (Australia)
- Encourage immigration of skilled workers (Finland; Germany) – **promotes resource allocation and productivity** (Finland)
- Bringing **returnees** back into the labour market (Ireland)
- Need for long-term perspective; **avoid reactive policies** (New Zealand)
- Stronger **link of education and training policies and immigration** policies (New Zealand)

Overall, important topic of discussion with large focus on immigration

Other issues – broadening the agenda

Some commissions have gone a little further:

- Australia and New Zealand have explored the **productivity of government services** – also raised by UK
- Australia has looked at the productivity of the **health system**
- Ireland has looked at **housing markets and its impact on competitiveness**
- **Measurement of productivity** is a recurring theme too (e.g. Belgium, Denmark, Ireland) – also UK

4. SUMMARY AND CONCLUSIONS

Pro-productivity institutions - overall

- Overall, productivity boards are pursuing a **common agenda**, although with large variation in focus.
- Most of the work is focused on analysis and policies related to **within-firm drivers** of productivity, i.e., investment, human capital, innovation, digitalisation, entrepreneurship and business dynamics
- Work on **external drivers is more varied**, and some issues (regions, industrial policies, climate change, link to wellbeing, ...) have only been addressed by some commissions thus far.
- The **agenda setting** of productivity boards is not always fully clear:
 - Does the analysis or (quantified) importance of a driver matter – e.g. France’s interest in human capital as the main factor explaining the slowdown in productivity? But **only some productivity commissions have undertaken quantitative assessments** of the productivity slowdown.
 - Or is the agenda driven by **political considerations** – where is change possible; what is topical?
 - **Composition of boards** may matter – e.g. academic (France/Germany) or also business (Ireland)
 - To what extent does the **international agenda** (e.g. EU, OECD) affect the choice of topics?
- There is scope for more **bilateral/international cooperation** between boards:
 - Cooperation in analytical work (e.g. cross-country analysis)
 - Exchanges of experiences, lessons learned – happening to some extent in EU and OECD context
 - Bilateral or multilateral cooperation on common policy challenges.

Pro-productivity institutions – analysis

- Much of the **research of productivity commissions follows relatively standard lines**:
 - Examination of trends in productivity, at aggregate and sectoral level
 - Growth accounting, to determine contributions to productivity growth of capital, labour and technology
 - Micro-economics of productivity, e.g. productivity divergence, resource allocation
 - Comparison of productivity levels
 - Examination of specific factors, e.g. skills, R&D, etc.
- Some **interesting new areas of focus and insights** are emerging, e.g.:
 - France's insights in role **human capital in explaining slowdown** and gap leaders and laggards
 - New Zealand's **analysis of frontier firms** starts to address an issue signaled by several countries and moves beyond a strong focus on laggards and zombie firms
 - Australia and Germany have started to tackle **issues linked to data and productivity**
- But relatively **little exploratory work** on issues not covered by **data and empirical analysis**.
- However, also areas that seem to have **received little attention**, e.g.:
 - **Little policy analysis of slowdown in investment** and drivers of investment, including intangibles
 - Little attention for the role of **financial markets and macro-economic policy**
 - Little on factors driving slowdown in technology diffusion and policies for **technology diffusion**
 - **Relatively little on competition**, in particular in context of digitalization and slowdown in business dynamics

Pro-productivity institutions – policy insights

- Most of the policy recommendations are familiar and **reflect insights from long-standing work on productivity and structural reform**
- Some issues are **raised without much policy follow-up**, e.g. productivity and costs R&D
- Some policy reflections are starting to **go beyond established policy lessons**, e.g.:
 - New Zealand’s proposal for a **more focused innovation policy**
 - Germany’s interest in **sovereignty**
 - Germany’s focus on **data, cloud computing, platforms**
 - Support for a **range of new skills** (soft, digital, green, management, leadership, etc.)
 - Interest in **immigration** as factor for productivity
- Some policy areas, potentially affecting productivity, **seem out of bounds**, however:
 - Little discussion of **macro-economic** policy and productivity
 - Little discussion of **financial markets**
 - Little discussion of **trade policies**, especially in European countries

Some gaps in the work of productivity commissions

Little work on:

- *The impacts of climate change on productivity*, and more generally measures of environmental or resource productivity. Some work starting on the implications of climate change for competitiveness (Ireland)
- *The role of intermediate inputs for productivity*. Apart from some work in France's 2022 productivity report, few productivity commissions have taken a so-called KLEMS perspective on productivity.
- *Productivity of the public sector and its impact on aggregate productivity*. Some work on topic in Australia and New Zealand, raised also in UK report.
- *Wages, inequality, wellbeing and productivity*. Not much work on how the benefits of productivity are diffused to workers and across the economy through wages, and how this affects inequality in the economy. Also only few commissions looking beyond GDP.

Also some issues perhaps not included in **official mandates** of all productivity commissions and not covered:

- *Macroeconomic policy* – link to productivity only noted in some reports.
- *Financial markets* – not emerging as an important topic in the work thus far
- *Regional policies* – not addressed by most, even in some countries with strong regional governments
- *Trade policies* (EU countries) – likely linked to EU trade powers
- *Governance and institutions* – may be considered out of scope

Final conclusions

- Most productivity commissions are relatively **new and their agenda is still evolving**. The recent COVID crisis may have affected the orientation of the work over the short term.
- Most commissions have been established by government, but with **different perspectives on their role** – not all commissions seem to be focused on providing specific policy advice. The composition of boards may matter for agenda setting.
- **Range of work and insights are emerging**, but not yet clear how these insights will affect our overall understanding of productivity and the international debate – this may also depend on the extent to which insights feed back into academic & international debates
- **Much scope for cooperation between commissions** on research, experiences and policy lessons - important role for international organisations, but also scope for bilateral and multilateral exchanges
- **Academic research** may wish to tap more into the work of the commissions, as they provide an interesting **laboratory for applied policy research**

Thank you, comments are most welcome

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