STRUCTURAL IMPEDIMENTS TO LONG-TERM FINANCING

1. Long-term financing of capital formation – both tangible and intangible, is crucial for economic growth and welfare. Financial systems – including banking systems and securities markets – play an essential role in the pooling of capital, the transformation of maturity and the allocation of capital across projects and jurisdictions. Requirements for investment in long-term projects in advanced and emerging economies include supporting infrastructure, financing the "greening" of the economy and exploit opportunities for innovation and "new" sources of growth.

2. This note focuses on **structural impediments** to *stable* and *well allocated* long-term financing revealed or created by the crisis**.** Well allocated capital flows are those directed towards projects in sectors and countries that have the potential to yield the best returns taking into account inherent risks. This is where investment should be allocated to have the greatest effect on growth, while offering the best returns to potential investors. Allowing for underlying risks, such flows should be sustainable to avoid the risk of inefficient reversals in capital flows. The crisis has further underlined the risks associated with excessive or poorly directed capital flows.

3. While difficulties in funding long-term investment have become more binding since the crisis due to pressures on banking systems and a general loss of risk appetite, there have long been **structural factors that hold back investment** either directly or indirectly by creating an unfavourable environment in terms of investment returns. This note focuses structural impediments that act on the **pull factors** that draw investors to specific markets and to invest through particular channels, rather than the non-structural push factors that create pools of capital that need to be allocated. The large variations across countries in the ability to attract long-term capital flows and their stability point to the potential significance of these domestic structural factors, although no-structural factors such as macroeconomic and political stability also play an important role.

4. From a growth and development perspective, it is important not only that there is financing for long-term projects but that the flows are **stable and well allocated**. The crisis has revealed that this was all-too-often not the case in the years running up to the crisis with the consequent instability and low returns. A key mechanism was the flowing "uphill" from some emerging to advanced economies, transmitted via potentially vulnerable vehicles such as bank debt, and ultimately ended up in highly speculative real estate development. The financial crisis itself created further impediment to long-term investment flows, these being hampered by dysfunctional banking systems and a general loss of risk appetite.

5. This note considers key structural impediments to stable and well allocated capital flows. Issues relating specifically to the financial sector, its regulation and developments are considered in other contributions to the work on Long-Term Financing for Growth and Development. Direct analysis of structural factors holding back long-term investment financing is relatively limited, but the literature on the role of structural policies in the economy sheds light indirectly on these factors.

Channels through which structural obstacles hold back stable and efficient financing

Direct impediments

6. Many countries impose *direct* restrictions on long-term investment, not all of which appear to be justified by public policy considerations:

- ***Legal impediments*** to foreign direct investment and other legal barriers to foreign ownership, including in specific sectors that are considered strategic.

- ***State ownership*** that either directly precludes foreign investment in a business or *indirectly* creates market conditions in which foreign investors are unwilling to invest because of the risk of excessive state intervention.

Indirect impediments

7. There is a range of indirect impediments that affect the opportunities for sustainable long-term investment through the rate of return on capital. These factors can also affect how risks associated with long-term investment are managed in the economy. It is important that investors' incentives are aligned with the underlying opportunities in the economy and policy objectives.

- ***Unfavourable product market regulations*** create a high regulatory burden, reducing investment returns, while potentially reducing competition and distorting incentives to allocate invest to the sectors where it is most productive (Bourles *et al.*, 2010). The OECD Product Market Regulation (PMR) index and World Bank *Doing Business* indicators show that there is wide variation across economies. Analysis suggests that high regulatory burdens reduce growth, including through restricting productive investment. Weak competition policy can also distort incentives to invest.

- The ***quality and strength of legal protection*** affects the expected return by investors and the cost at which they are willing to provide finance. Stronger creditor rights reduce spreads, although they do not seem to matter for loan size and maturity (Bae and Goyal, 2009). The efficiency of judicial proceedings appears to important effects on the *de facto* quality of legal protection. Inward FDI responds strongly specific institutional provisions, such as arbitration of disputes and legal procedures to establish foreign subsidiaries (Waglé, 2011).

- The ***absence of specific legal frameworks*** around investment and other activities holds back long-term investment. Lack of development of legal and administrative frameworks for PPPs (public private partnerships) has prevented the development of this form of financing in some countries. More broadly, for example, long-term investment in innovation can be constrained by weak legal frameworks for intellectual property. Investment is green innovation is held back by a lack of markets to create incentives for the development of these activities, lack of predictability and stability around future government policy.

- The ***quality of the public finances and government spending***, including the provision of infrastructure by the private sector, influences returns to private investment. More widely on the spending side, the quality of human capital is a major determinant of the rate of return on capital. This in turn is impaired in some countries by low teaching quality and learning outcomes.

- ***Unfavourable tax system***, include high taxes on investment returns themselves or on labour, reduce the incentive to invest by lowering post-tax returns. A lack of effective tax cooperation risks, both creating perverse incentives through double taxation and cases where the allocation of capital can be influenced by distortions in international taxation agreements.

- Weaknesses in the functioning of ***labour markets*** and labour market institutions, such as rigid job protection for some strands of the labour force and dualism, are likely to impair the returns on long-term capital. In emerging market economies, weak incentives for formal labour participation can hold back the scope to make productive investment.

- An underdeveloped ***domestic financial system*** in the receiving country can, as well as reflecting other structural weaknesses, in itself make it more difficult to investors to channel funds towards long-term investment and make it more difficult to manage risk associated with such investments.

Structural impediments to infrastructure investment

8. Infrastructure investment plays a key role in sustaining growth and can be held back by specific impediments. While it is difficult empirically to identify the direction of causality between infrastructure investment and incomes, there is some evidence that infrastructure investment boosts growth over and beyond its measured impact on the capital stock (Sutherland et al.¸ 2009). Evidence from developed countries suggests that these effects on long-term growth may be stronger at lower levels of provision and that countries have experienced episodes both of under- and over-provision of capital. In addition, the growth effects may be reduced where infrastructure is used inefficiently. For example, a lack of fees and congestion charges for road systems can lead to congestion of the infrastructure. Equally, anti-competitive practices by incumbent infrastructure operators, for example in network industries, increase the costs and reduce benefits of installed capacity.

9. Evidence suggests that investment may be too low where (Sutherland et al.¸ 2009):

- ***Incentive regulation***, such as setting price caps for infrastructure services, does not reduce costs or mimic a competitive environment. A lack of independence and accountability of the sectoral regulators can create uncertainty or reduce expected returns. There is evidence that price-cap regulation, when combined with regulatory independence boosts investment especially in electricity and telecommunications. Setting access prices for users of infrastructure, however, can both deter investment if the price is too low or create overinvestment if it is too high.

- There are ***barriers to entry*** – such as requiring vertical bundling and a lack of regulated third part access regimes –in the network industries, especially in the energy and telecommunication sectors. Vertical integration curbs firm-level investment in the electricity sector.

- There is a lack of ***insufficient interconnection capacity*** at both the domestic and international levels. This creates barriers to competition and efficient investment, particularly the development of energy markets. This often reflects the lack of cooperation and common frameworks between regional or national regulators.

Achieving stable capital flows

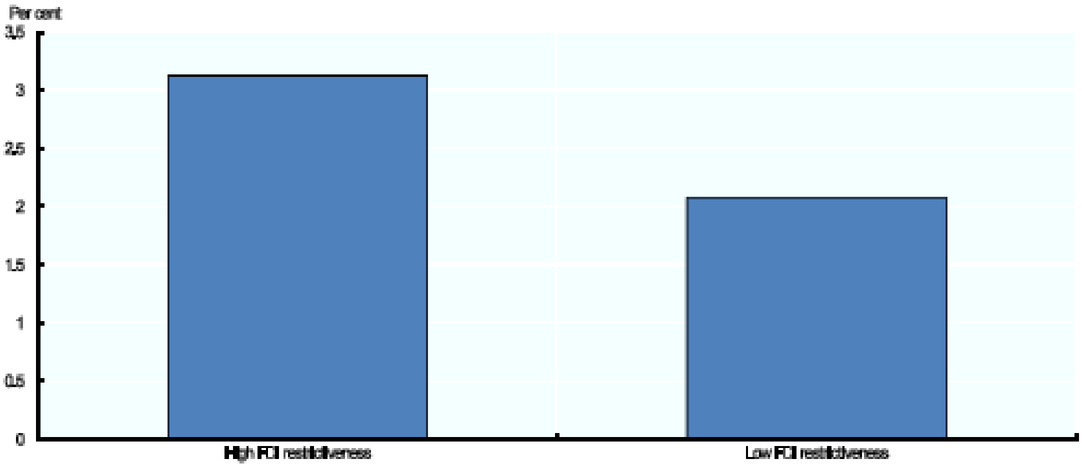
10. Weak structural policies and conditions contribute to unstable capital flows. These impediments bias financing flows towards short-term investments away from long-term financing. Such instability can in itself act as a further deterrent to longer term invest. New empirical analysis by the OECD, covering both advanced and emerging economies, shows that a bias in gross external liabilities towards debt, in particular bank debt, substantially increases the risk of financial crises (OECD, 2012a). Currency mismatch of assets and liabilities and shorter banking debt maturities add to this increased crisis risk, the latter

mainly by increasing financial contagion. By contrast, financial integration through foreign direct investment (FDI) is found to have little adverse impact on financial vulnerabilities. Macroprudential regulations can also influence the composition and riskiness of investments. The bias towards current mismatch and shorter term bank debt can be driven by structural factors:

- ***Tax systems*** that favour debt over equity financing decrease the incentive towards long-term investment. By contrast, tax treaties that remove double taxation increase FDI.

- ***Strict product market regulation*** increases the bias towards debt by orienting external financing away from equity and FDI. Higher regulatory barriers to FDI and equity investment result in an increased bias of external liabilities towards debt. Lower capital account openness to FDI and equity inflows raises currency mismatch, by inducing a bias in capital inflows towards forms that are denominated in foreign currency.

Restrictive regulations on FDI increase crisis risk
Countries' annual probability of systemic banking crisis



Note: Bars represent, for two different levels of FDI restrictiveness, the annual probability of suffering a systemic banking crisis. OECD countries are split into two equally-sized groups based on their levels of FDI restrictiveness. High FDI restrictiveness is defined as the average across the high FDI restrictiveness group, with low FDI restrictiveness being defined correspondingly.
Source: OECD calculations based on Ahrend and Goujard (2012a).

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