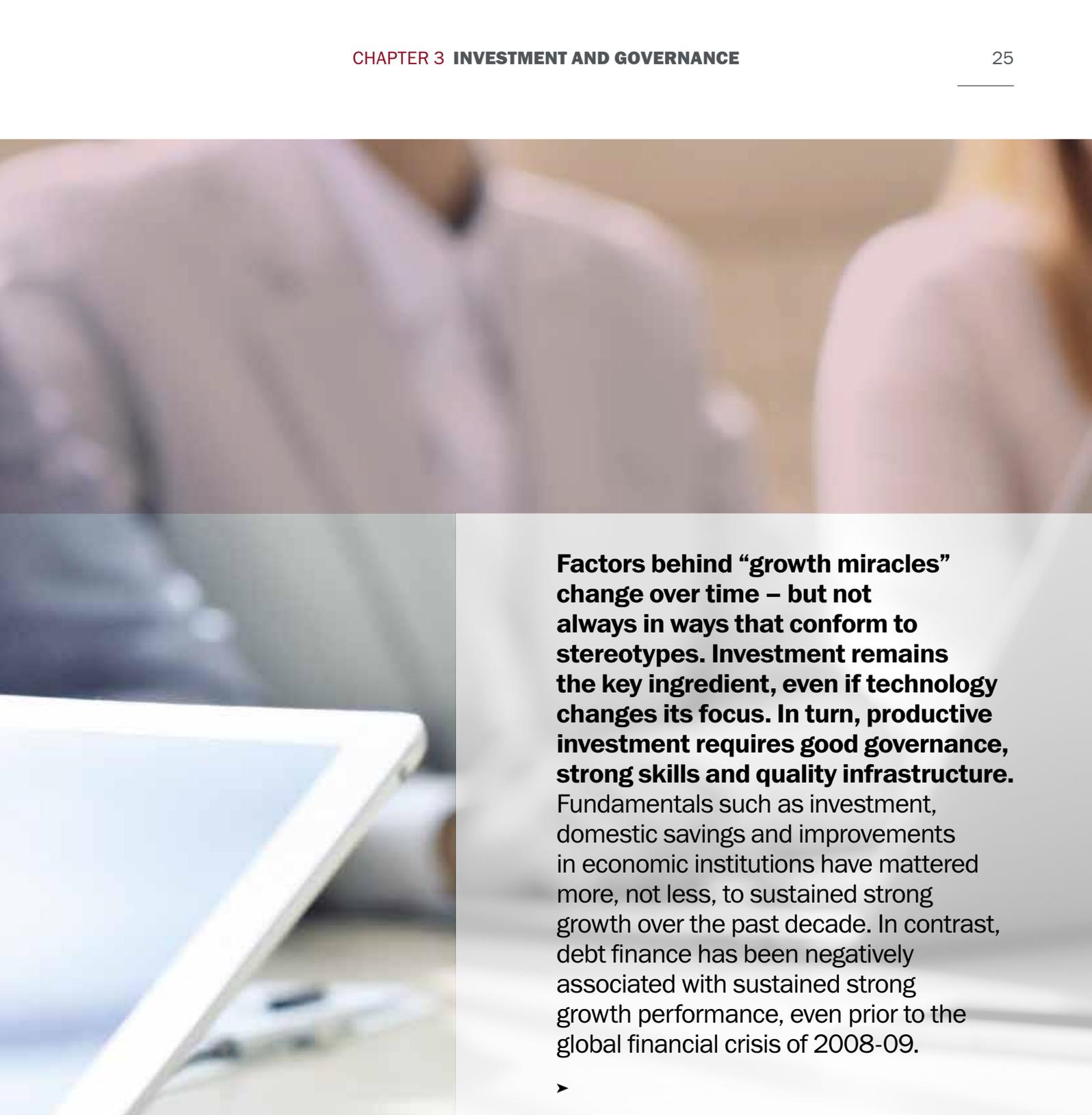


3

INVESTMENT AND GOVERNANCE





Factors behind “growth miracles” change over time – but not always in ways that conform to stereotypes. Investment remains the key ingredient, even if technology changes its focus. In turn, productive investment requires good governance, strong skills and quality infrastructure.

Fundamentals such as investment, domestic savings and improvements in economic institutions have mattered more, not less, to sustained strong growth over the past decade. In contrast, debt finance has been negatively associated with sustained strong growth performance, even prior to the global financial crisis of 2008-09.



IN THE UK,
MANUFACTURING
EMPLOYMENT
PEAKED AT ABOUT

50%

OF TOTAL EMPLOYMENT
IN 1900 OR SO

IN BRAZIL, PEAK
MANUFACTURING
EMPLOYMENT
OCCURRED AROUND

25%

OF TOTAL EMPLOYMENT
IN THE 1980S



DEVELOPMENT MODELS HAVE EVOLVED WITH TECHNOLOGY

All of the top 10 episodes of sustained strong growth identified in the previous analysis started before 1975; the top five started in or before 1961. Likewise, much of the cross-country analysis of growth episodes is based on data from the 1960s, 1970s and 1980s.¹ Questions are often asked as to whether the lessons of these past episodes of growth still apply today.

Globalisation and technological change have undoubtedly had an impact on development models. The world economy has become more interconnected through global value chains, trade and financial flows. Technological change has rendered certain services increasingly tradeable across borders (such as call centres and consultancy services). The size of the financial sector has grown rapidly across emerging markets and developed countries. These changes have had a profound impact on the patterns of economic convergence.

As economies develop, their share of agricultural employment declines and their share of services employment rises. The pattern of manufacturing employment is more complex: it typically rises rapidly at first, but then peaks and starts to decline. In earlier decades, many economies in Asia were able to develop large, export-oriented manufacturing sectors and integrate them into global value chains by taking advantage of relatively skilled but cheap labour and advances in transportation and telecommunications, which supported the seamless operation of cross-border supply chains.

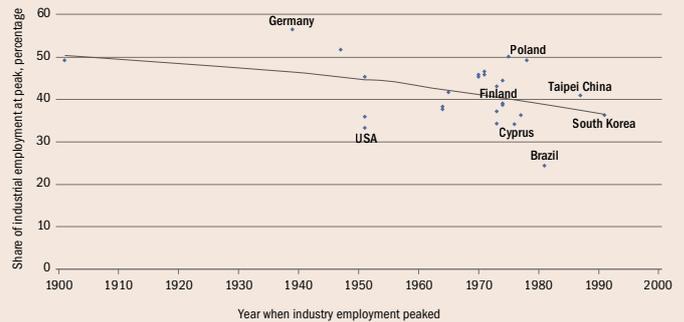
Global industry has become more capital intensive and less labour intensive over time, however, with many tasks previously done by humans now automated. This has limited the potential for industrialisation based on lower wages.² In addition, as incomes have continued to rise worldwide, demand for services has outpaced demand for manufactured goods (at a certain point, people are more likely to spend an additional dollar of income on a meal out or a trip abroad than on an extra pair of shoes).

MANUFACTURING NOW ACCOUNTS FOR A SMALLER SHARE OF THE ECONOMY

As a result, the level at which manufacturing's share of employment peaks in a country's income convergence trajectory has been declining (see Chart 3.1). For instance, in the United Kingdom, manufacturing employment peaked at about 50 per cent of total employment around 1900. In the USA, it peaked around 35 per cent in the 1950s. In Brazil, peak manufacturing employment occurred at about 25 per cent of total employment in the 1980s.

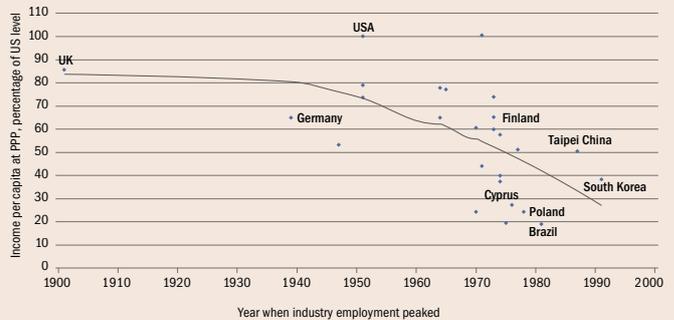
As a consequence, peak manufacturing has been registering earlier in development terms – that is, at increasingly lower levels of income per capita relative to that of the United States of America (see Chart 3.2).³ For instance, Germany and Finland both enjoyed income levels of around 70 per cent of that of the USA at the time their manufacturing peaked as a share of total employment (the ratios of these economies' per capita income to that of the USA remain similar today). In South Korea, peak manufacturing occurred when its income per capita was still less than 40 per cent of the US level. For Poland and Brazil, the corresponding ratio was closer to 20 per cent.

CHART 3.1. Industrial employment as a share of total employment is peaking at ever-lower levels



Source: Sposi et al. (2018).

CHART 3.2. Industrial employment is peaking at ever-lower levels of income per capita, expressed as a percentage of the US level at purchasing power parity



Source: Sposi et al. (2018).

TECHNOLOGICAL CHANGE HAS RENDERED CERTAIN SERVICES INCREASINGLY TRADEABLE ACROSS BORDERS



¹ See, for instance, Lee (2018).

² See World Bank (2017) for a recent discussion of the manufacturing-based development model.

³ See Sposi et al. (2018).

PREMATURE DEINDUSTRIALISATION MAY BE A THREAT OR AN OPPORTUNITY

This regularity, dubbed “premature deindustrialisation”, is often portrayed as a major headwind to economic development.⁴ After manufacturing employment peaks, it may become more difficult to create quality jobs, upgrade skills and contain rising inequalities, as we discuss in subsequent sections of this report.

On the flip side, the declining importance of manufacturing may also present an opportunity to invest in new areas, such as the green economy, knowledge-intensive services, or tourism. Recent studies suggest that, like manufacturing, tradeable services also enjoy faster productivity growth,⁵ owing to the same technological advances in transportation, telecommunications and computing that have made such services more tradeable in the first place. Greater competition in the global market also plays a role. Premature deindustrialisation also presents an opportunity to “leapfrog” certain stages of development that were seen as prerequisites in the past, including investment in costly network infrastructure, such as roads and telecommunication lines.⁶ It further raises the question as to whether the fundamental determinants of exceptional growth performance derived from past experience remain valid today.

CERTAIN FUNDAMENTALS OF STRONG GROWTH PERFORMANCE HAVE EVOLVED

To check whether the fundamental drivers of episodes of strong growth may have changed in recent years, we have looked specifically at the factors supporting such episodes in the decade since the global financial crisis of 2008-09 and compared them with the catalysts for earlier episodes. Our analysis covers multiple aspects: the likelihood of experiencing an episode of strong growth, the likelihood of experiencing an episode of poor growth, the likelihood of an episode coming to an end in a given year and the strength of economic performance once an episode has come to an end. The latter distinguishes between “hard landings”, which can undo some of the gains of earlier boom years, and “soft landings”, where the economy slows, but continues to perform in line with its peers.⁷

Focusing on episodes of strong relative growth performance enables us to identify a meaningful number of episodes of sustained out-performance in the aftermath of the 2008-09 financial crisis, even though economic growth slowed during that period, by about 1.3 percentage points a year, on average, from the pre-crisis years. The results of our empirical analysis are summarised in Table 3.1.

TABLE 3.1. Factors supporting recent growth

Correlations of growth out-performance episodes: a summary view

Factor	Increases likelihood of out-perf.	Reduces chance of under-perf.	More important since 2008		Makes episodes last longer	Helps ensure “soft landing”
			Supporting out-perf.	Preventing under-perf.		
Investment	++	+	+		++	++
Democratic institutions	+	+	-	+?		
Economic institutions	+	++		-?	+?	+
Openness to trade		+				
Openness to finance		+	-	+	-	
Debt finance	--	-				
Equity finance	++	+		+		
Domestic savings	++	++				+
Infrastructure	+	+				

Source: Plekhanov and Stostad (2018).

Note: Based on regression analysis as set out in Plekhanov and Stostad (2018).

⁴ See Rodrik (2016).

⁵ See Mano and Castillo (2015).

⁶ See Brezis et al. (1993).

⁷ See Plekhanov and Stostad (2018) for details

INVESTMENT HAS PLAYED A STRONGER ROLE, IF ANYTHING

Despite lower investment levels and manufacturing's lesser contribution to GDP in recent years, investment has become a stronger, not weaker, predictor of growth out-performance. Higher rates of investment also prolong growth episodes and "soften" the landing once an episode of exceptional growth comes to an end. This is consistent with the "perspiration" view of economic development, whereby investment in physical capital can explain many of the so-called growth miracles (see, for instance, Krugman, 1994, and Young, 1995).

The effect of higher investment rates is further strengthened if investment is financed by higher domestic savings. If domestic savings are low, to boost investment, middle-income economies need to rely on foreign savings and to run persistent and large current-account deficits (the current-account balance being the difference between investment and domestic savings in an economy). This makes economies potentially vulnerable to abrupt changes in the external financing environment and sudden stops in capital flows that finance current-account deficits.

THE ROLE OF GOVERNANCE

Higher-quality economic and political institutions have been associated with greater likelihood and length of sustained growth out-performance, as well as softer landings. The quality of economic institutions in this instance is captured by the Worldwide Governance Indicators (WGIs) of control of corruption, rule of law, regulatory quality and government effectiveness compiled by the World Bank.⁸ The quality of political institutions is measured by the WGIs of voice and accountability, and political stability and absence of violence/terrorism (qualitatively, analysis using Polity variables⁹ produces similar results).

The estimated effects are sizeable. An increase of 1 standard deviation in the quality of economic institutions – say, from the level of Jordan to the level of Estonia – makes an episode of exceptional growth performance 10 to 15 percentage points more likely and an episode of protracted poor growth 20 to 30 percentage points less likely.¹⁰

In recent years, the quality of institutions and, in particular, the quality of political checks and balances appears to have played a greater role in ensuring robust outcomes. It appears to shield economies from the risk of prolonged poor performance, though it also seems to lessen the likelihood of spectacular growth.

Worldwide, there is an observable strong positive relationship between income per capita and the quality of governance (see Chart 3.3). In addition, two stylised facts emerge from the chart. First, high-income economies generally have stronger governance than the linear relationship between the logarithm of per capita income and the quality of institutions would predict. In other words, as income rises, economic development relies ever more on improvements in the quality of governance, with growth becoming more "governance intensive".

GERMAN INCOME WAS AROUND
70%
OF THE US LEVEL WHEN ITS MANUFACTURING PEAKED AS A SHARE OF TOTAL EMPLOYMENT

DEFICIT OF GOVERNANCE IN EBRD REGIONS

Second, economies in the EBRD regions largely have lower-quality institutions than other emerging markets with similar income levels (the corresponding dots on the chart tend to be located below the trend line).¹¹ This governance deficit may become particularly challenging in the later stages of middle-income transition.

It is also in stark contrast to the relatively strong standing of economies in the EBRD regions in terms of skills, also when using the new World Bank data on years of schooling adjusted for quality of tuition (see Chart 3.4). The picture is similar when other measures of student or adult skills are used (see EBRD, 2018).

WEAKER LINK BETWEEN ECONOMIC PERFORMANCE AND ECONOMIC OPENNESS

Another feature of growth episodes since the global financial crisis is a weakening of the link between economic performance and economic openness. In fact, openness to finance, as captured by the Chinn-Ito index of capital-account openness,¹² has had a curtailing effect on episodes of economic out-performance. Here too, however, the picture is more nuanced: much like democratic institutions, greater openness to trade (as measured by the ratios of imports and exports to GDP) and finance have increasingly tended to make episodes of sustained under-performance less likely.

Importantly, these results assume that investment remains unchanged as other determinants of growth performance evolve. In practice, reforms to boost economic openness and the quality of economic and political institutions may have indirect effects on growth out-performance by catalysing investment booms in addition to any direct effects captured in regression analysis.¹³

IN SOUTH KOREA, MANUFACTURING PEAKED WHEN ITS INCOME PER CAPITA WAS STILL LESS THAN

40%
OF THE US LEVEL



⁸ See Kaufmann et al. (2009) for a discussion.

⁹ <http://www.systemicpeace.org/polityproject.html> (last accessed 8 January 2019).

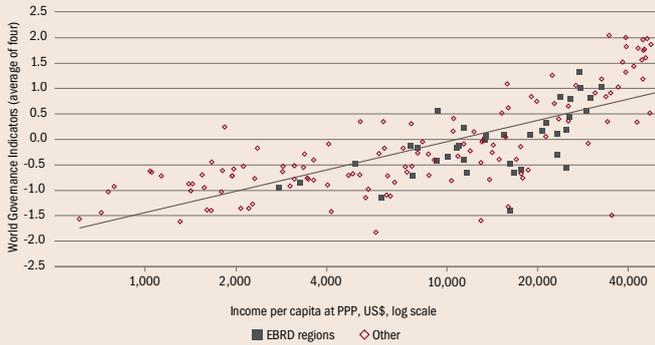
¹⁰ See Plekhanov and Stostad (2018) for estimates and a discussion.

¹¹ See also EBRD (2013).

¹² See Chinn and Ito (2006).

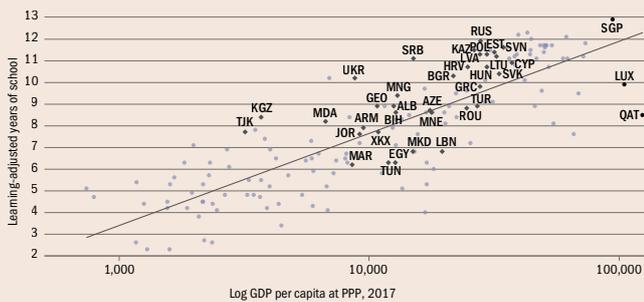
¹³ See Mauro (1995) for an early discussion of the relationship between corruption, investment and growth.

CHART 3.3. Improvements in the quality of governance and economic development go hand in hand, particularly at higher levels of income



Source: World Bank, IMF and authors' calculations.
 Note: The quality of economic institutions is captured by the simple average of the Worldwide Governance Indicators of control of corruption, rule of law, regulatory quality and government effectiveness. Based on 2017 data or the latest observations available.

CHART 3.4. Economies in the EBRD regions tend to perform well in terms of quality-adjusted years of schooling



Source: World Bank, IMF and authors' calculations.

CONCLUSION

Do the findings of long-term studies of growth, largely inspired by the economic fortunes of the 1960s to the 1990s, still apply? Analysis suggests that the determinants of sustained economic out-performance have evolved and that more recent episodes of sustained strong growth have distinctive features – but not always as commonly characterised. The fundamentals that underpinned Asia’s economic miracles – such as investment, domestic savings and improvements in the quality of economic institutions – matter more, not less. Higher investment levels, in turn, rely on good governance, supporting infrastructure and improvements in the skills needed to make investments productive.

AVERAGE ECONOMIC GROWTH ACROSS ECONOMIES WORLDWIDE SLOWED BY 1.3 PERCENTAGE POINTS PER ANNUM IN THE YEARS FOLLOWING THE 2008-09 CRISIS

