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## Latin America: locked up in the middle-income trap?

Special  
Herwin Loman

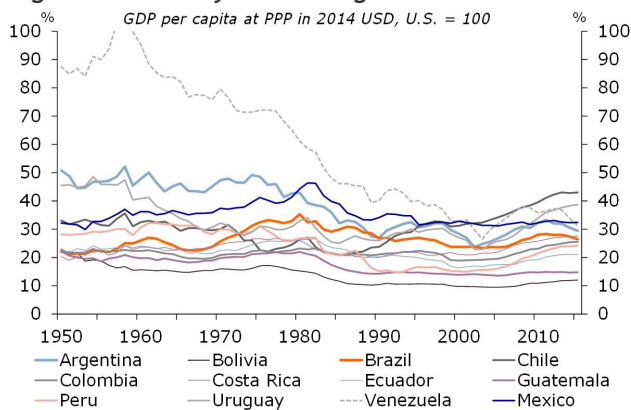
*This publication is part of the [Latin America after the commodity boom](#) series*

- While some progress was made during the commodity boom, Latin America's long-term success in achieving income convergence with the US has been disappointing.
- Labour productivity and total factor productivity growth were generally low to negative during Latin America's commodity boom.
- Institutionally, Latin America scores about average, with significant differences within the region. Chile remains the best-performing country, but has seen its lead erode.
- Latin America scores relatively poorly in terms of quality of infrastructure, education and R&D spending. In several countries the level of (technological) complexity may have fallen during the commodity boom.
- Overall, Latin American countries have not yet managed to break out of the middle-income trap. As commodity exports are no longer boosting growth, countries are facing both stronger incentives and a more urgent need to undertake structural reforms.

### Latin America's disappointing growth track record

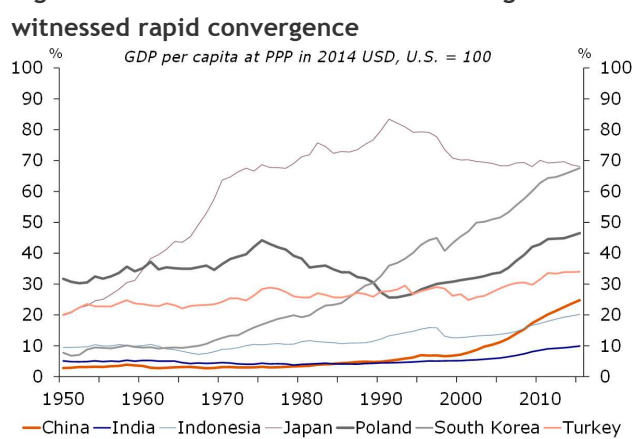
Latin America's long-term performance has been disappointing. When economic growth in Latin America was relatively high during the first decade of the twenty-first century, most countries in the region managed to narrow their income-per-capita gap with the United States. However, the region has seen virtually no convergence in the longer run, as the income gap between the US and Latin America has remained more or less the same since 1950 (figure 1). In certain periods - especially the 1970s and 1980s - the gap even increased. Over the period as a whole, Argentina and, especially, Venezuela turn out to be spectacular failures. Only Chile and Costa Rica score relatively well, as their income per capita at PPP increased from respectively 33% and 20% of the US level in 1950 to 43% and 28% in 2015. However, even that degree of convergence is moderate compared with some countries outside the region (figure 2). Of course, many countries outside Latin America also failed to achieve rapid convergence, but the lack of real success stories in Latin America is remarkable nonetheless.

**Figure 1: Virtually no convergence in Latam...**



Source: Conference Board

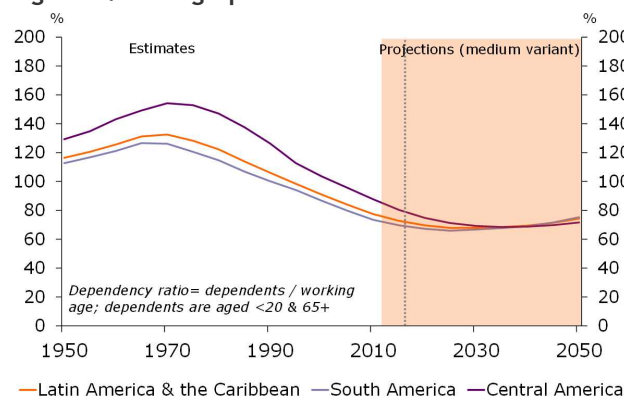
**Figure 2: ...some countries outside the region witnessed rapid convergence**



Source: Conference Board

## The challenge of raising productivity growth

**Figure 3: Demographic tailwinds almost over**

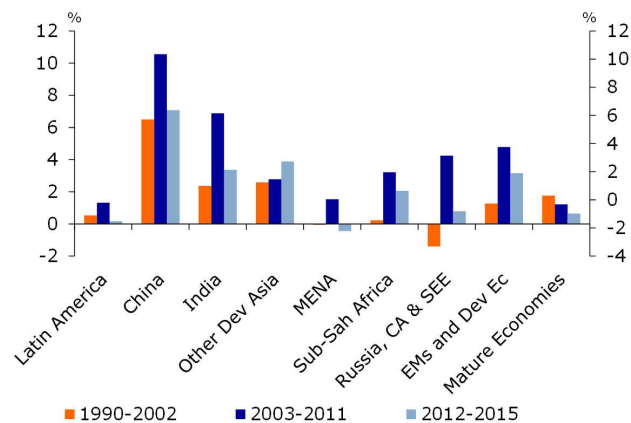


Source: UN

Should the relatively high levels of economic growth of the first decade of this century be viewed as a tipping point? To determine whether the convergence of the first decade of the twenty-first century could return after the weak growth of recent years, we need to look at the underlying growth patterns. In many countries labour has strongly contributed to growth in recent decades. However, as employment levels have risen and with many countries facing demographic ageing in the not-too-distant future, labour is likely to contribute less to growth than it has done in the past 15 years (figure 3). In the long run, income convergence can only be achieved through higher labour productivity. In this

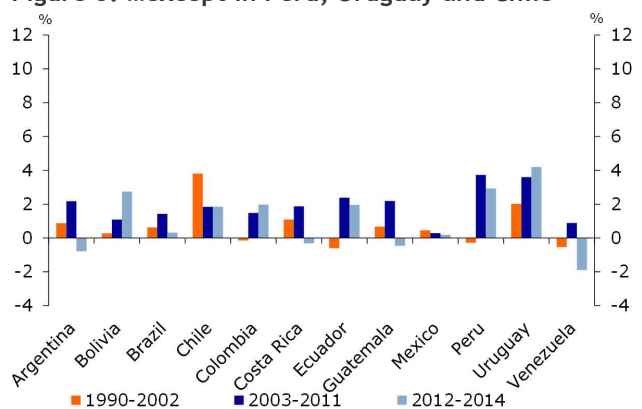
sense, Latin American countries have achieved some progress, but this progress is rather small in comparison with advances made elsewhere, especially in Asia (figure 4). Within the region, Chile, Uruguay and, more recently, Ecuador and Peru performed well by regional standards (figure 5). During the commodity boom of 2003-2011, investment picked up in most Latin American countries, which partially explains why labour productivity increased somewhat during this period. However, both savings and investment in Latin America remained low as a percentage of GDP (see [Latin America: the tide has turned](#)).

**Figure 4: Labour productivity growth has been low...**



Source: Conference Board

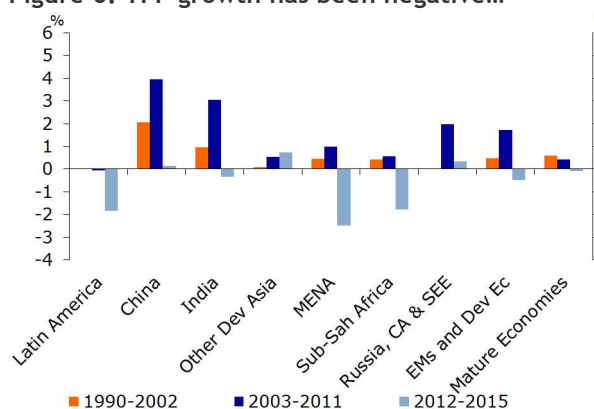
**Figure 5: ...except in Peru, Uruguay and Chile**



Source: Conference Board

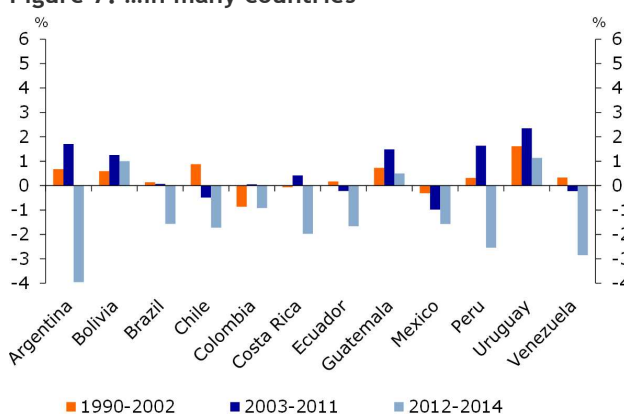
For the longer-run growth trend, total factor productivity (TFP) growth is particularly relevant. TFP indicates how much can be produced with given inputs of labour and capital and is thus an indicator of an economy's efficiency. TFP growth is particularly important for countries that want to transition from middle-income status to high-income status. Unfortunately, Latin America's recent TFP growth record is dismal, as TFP growth has been absent or even negative in the past decades (figure 6). Almost all Latin American countries score unfavourably, though Uruguay and to a lesser extent Bolivia, Guatemala and Peru do relatively well. The biggest economies, Brazil and Mexico, both had zero or negative TFP growth. However, in Brazil the agricultural sector has been an outlier. According to Rada & Valdes (2012), annual TFP growth in this sector reached 2.55% between 1985 and 2006. In most other Latin American countries productivity growth in the agricultural sector has been high by developing-country and emerging-market standards (Ludena, 2010). See [Latin America: agricultural perspectives](#) for more information on the agricultural sector.

Figure 6: TFP growth has been negative...



Source: Conference Board

Figure 7: ...in many countries



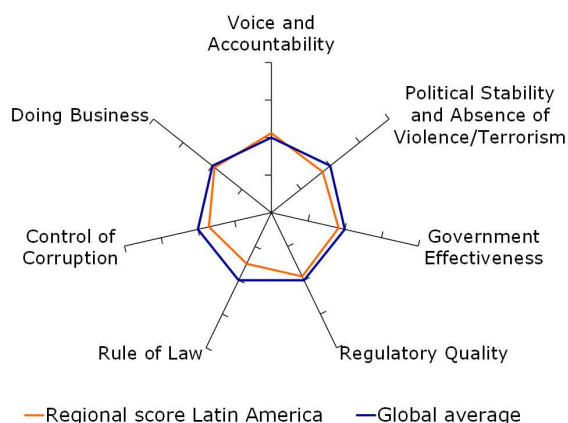
Source: Conference Board

## Latin America's structural growth impediments

### Institutions

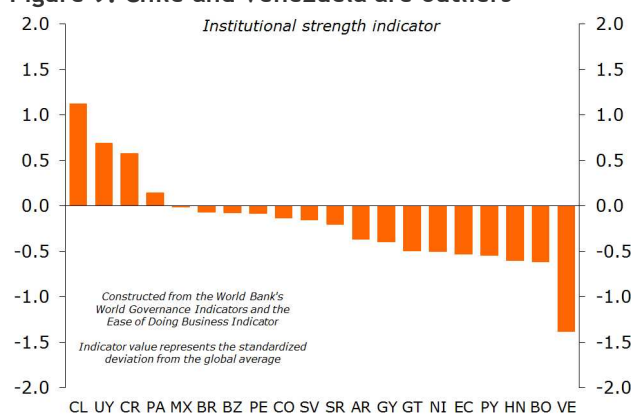
To further assess Latin America's long-term economic prospects, we must first look at its institutions. Institutions are an important determinant of longer-run economic performance (see, for example, Acemoglu and Robinson, 2012). Institutionally, Latin America scores close to the global average as a region, whereby the region's rule of law and control of corruption scores are clearly below the global average (figure 8). Differences between the countries in the region are sizeable (figure 9; see also [Latin America: progress through populist policies? A mixed picture](#) for more information).

Figure 8: Rule of law and control of corruption relatively weak



Source: World Bank

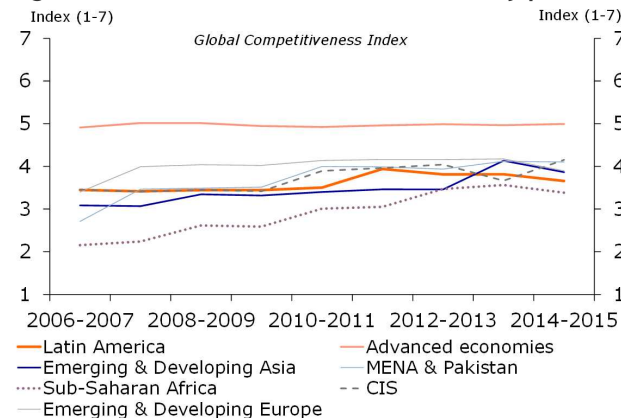
Figure 9: Chile and Venezuela are outliers



Source: World Bank

To assess the growth potential one can also look directly at the attractiveness of the business environment. According to the World Economic Forum, the business environment in Latin America has improved somewhat since 2006/2007. However, as other regions have progressed more rapidly, the region has turned from one of the most attractive parts of the emerging and developing world into the second least attractive region after Sub-Saharan Africa (figure 10). Within the region, Chile has become less of an outperformer in recent years but still remains the most attractive country, ahead of Panama and Costa Rica (figure 11). Brazil also scores rather well on the Global Competitiveness Index, but this can be partially explained by the large size of its domestic market, which makes the country attractive to businesses. Meanwhile, Venezuela, Paraguay and Guyana have the lowest score on this index.

**Figure 10: Business environment relatively poor...**



Source: World Economic Forum

**Figure 11: ...especially in Venezuela, Paraguay and Guyana**

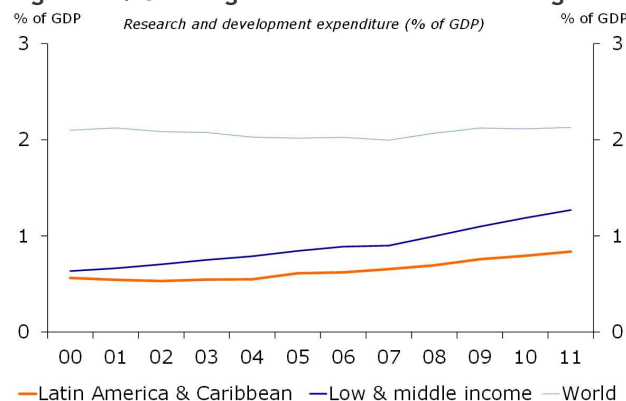


Source: World Economic Forum

## Human capital constraints

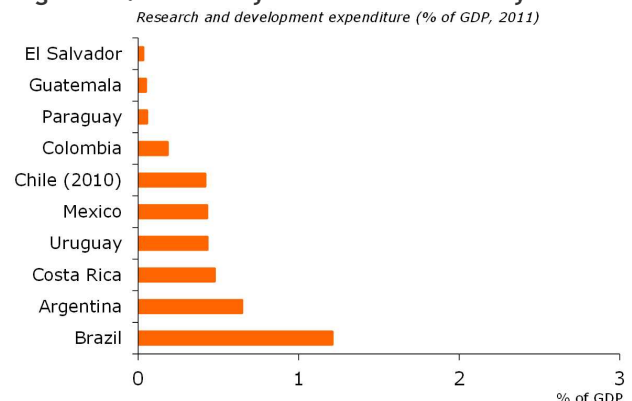
Improving long-term growth prospects and productivity requires raising the skill level of the people. In this respect, Latin America needs to overcome several challenges. Firstly, R&D expenditure in the region has been rising, but less quickly than the average for all low-income and middle-income countries (figure 12). Brazil does relatively well in this respect, however (figure 13).

**Figure 12: Growing R&D remains below average...**



Source: World Bank

**Figure 13: ...whereby Brazil does relatively well**



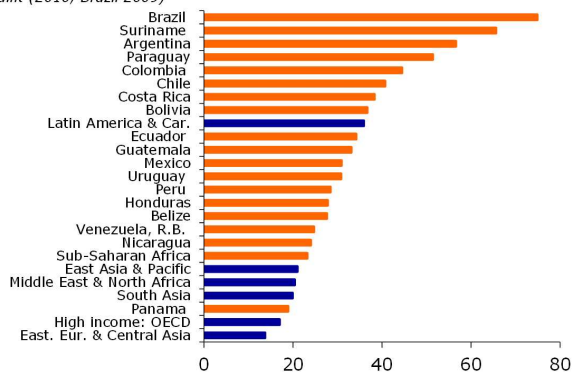
Source: World Bank

Secondly, there is a lack of adequately educated workers (figure 14). According to the World Bank, a high percentage of employers in Latin America and the Caribbean identify lack of an adequately educated workforce as a major constraint. The problem seems to be most pressing in Brazil, Suriname, Argentina and Paraguay. Educational institutions have traditionally been weak in most Latin American countries. In recent decades, enrolment in primary and secondary education has increased rapidly. While significant

progress has thus been made, the quality of education remains a problem in many Latin American countries and inequality in access to education also remains a concern (OECD, 2014). These human capital and technological constraints limit the ability of countries to diversify and increase economic productivity. The export complexity of an economy can be used as an indicator to assess to what extent countries have been able to make a structural transformation (IMF, 2015) and have been able to move up the value chains. Latin America scores somewhat better than all emerging markets and developing markets as a group (figure 15). However complexity has not grown in recent decades. In fact, several countries, notably Brazil, Argentina and Peru, have experienced declining levels of economic complexity over the past few decades.

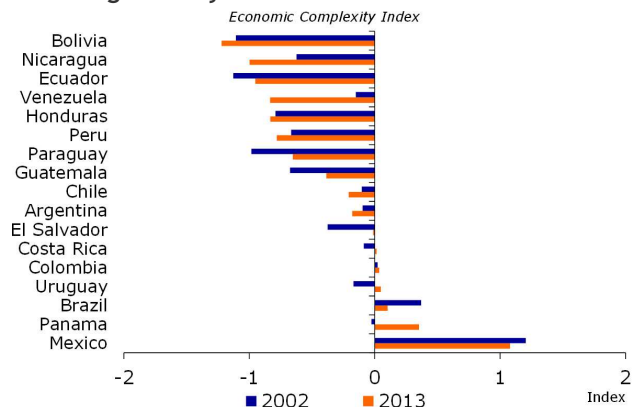
**Figure 14: Severe lack of skilled workers**

*Percentage of firms identifying an inadequately educated workforce as a major constraint (2010, Brazil 2009)*



Source: World Bank

**Figure 15: Economic complexity is low and declining in many countries**



Source: Atlas of Economic Complexity

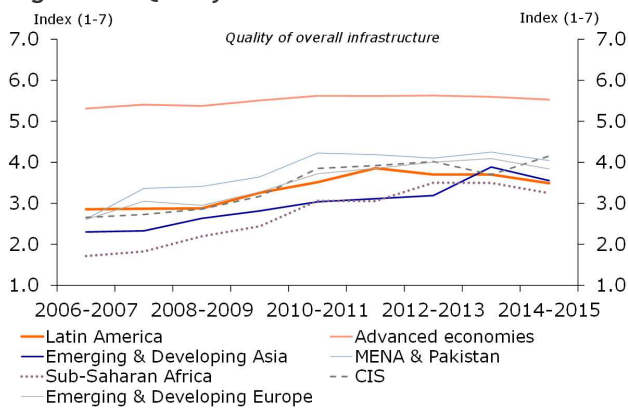
## Infrastructure

Infrastructure is another important economic problem (figure 16 and 17). Many countries in the region cut back on infrastructure investment during the 1980s debt crisis and in most countries infrastructure investment has remained insufficient ever since. This increases the costs of doing business. While logistics costs account for just 9% of GDP in high-income countries, they take up 16% to 26% of GDP in Latin America and the Caribbean. Worldwide, Brazil and Colombia have the highest costs for international container traffic (OECD 2013). Probably also due to the institutional problems, Latin America's infrastructure problem also extends to the digital arena. The region is, for example, also far behind developing Asia in terms of access to (mobile broadband) internet (OECD, 2013). Insufficient supply of infrastructure also mitigates regional trade integration, as transport costs are often as high for intra-regional trade as they are for extra-regional trade (OECD, 2014). According to FAO (2012) more than 50% of fruit is lost or wasted before it reaches the final destination (for information on the impact of the lack of infrastructure on the food and agricultural sector, see [Latin America: agricultural perspectives](#)).

In general, Latin America's exports tend to be logistics-intensive or time-sensitive, which means that improving infrastructure efficiency is likely to have substantial economic benefits. According to Calderón and Servén (2010), doubling the annual investment in infrastructure from 2.5% of GDP to 5% of GDP could increase potential annual GDP growth by no less than 2 percentage points a year. According to Barbero (2012) infrastructure investment was particularly low in Mexico and Uruguay, at 1% to 2% of GDP in the period 2008-2011, while Bolivia and Peru had relatively high levels of around 4% of GDP.

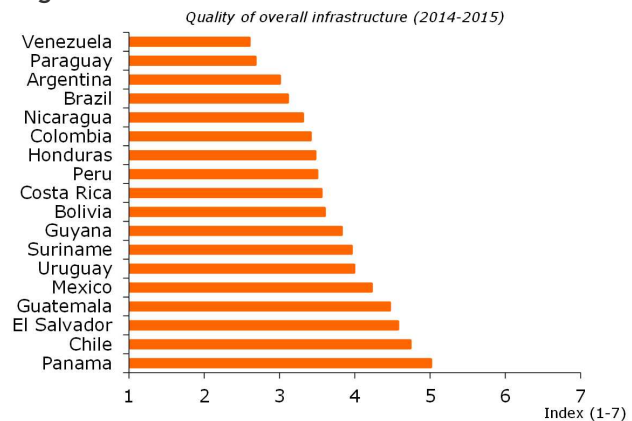


**Figure 16: Quality of infrastructure is low...**



Source: World Economic Forum

**Figure 17: ...especially in Venezuela, Paraguay, Argentina and Brazil**



Source: World Economic Forum

## Conclusion

There are currently no clear signs that the Latin American countries can return to the high economic growth rates of the first decade of this century. As a whole, the region seems to have been able to improve its business environment and the quality of its infrastructure and increase R&D expenditure, but progress has been less rapid than elsewhere. Institutional, human capital and infrastructure challenges probably also explain why the region's economic complexity has remained stagnant or, in some cases, even reversed in the past decade. While there are huge differences between the countries, with Chile, Uruguay, Costa Rica and Panama often scoring relatively high and Venezuela and Paraguay scoring relatively low, there are no clear indications that even the best-scoring countries are poised to break the middle-income trap. However, perhaps the end of the commodity boom will turn out to be a blessing in disguise. Now that developments on commodity markets are no longer boosting growth, the need to undertake - and thereby also the incentives to undertake - structural reforms to boost Latin America's growth potential has grown.

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## Annex

Figure 18: Argentina

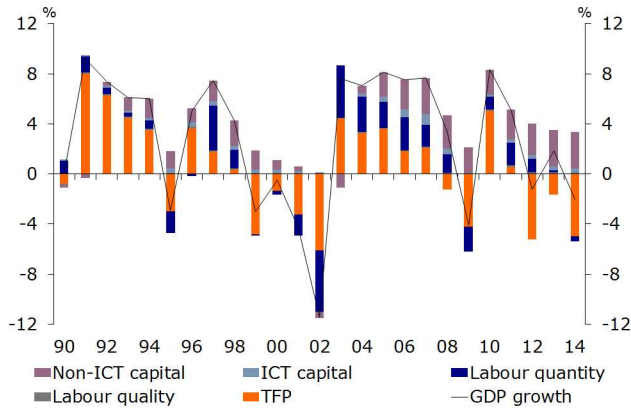


Figure 19: Brazil

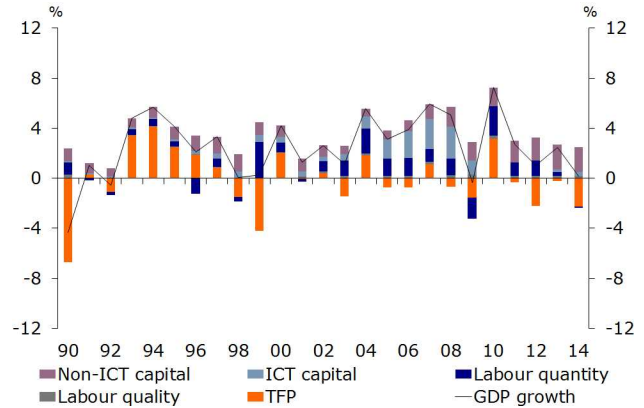


Figure 20: Chile

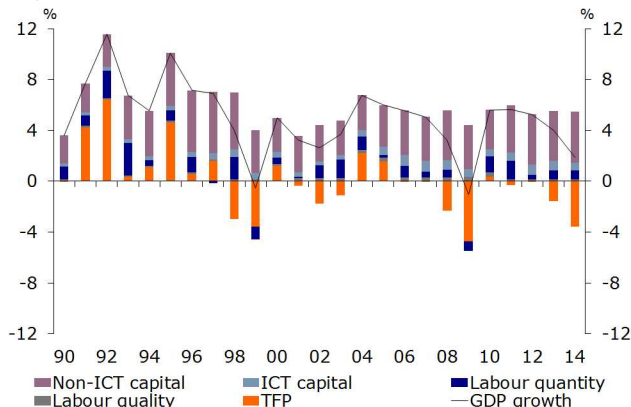


Figure 21: Colombia

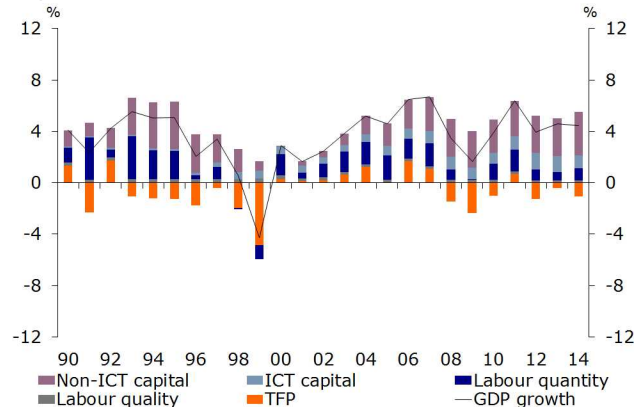


Figure 22: Mexico

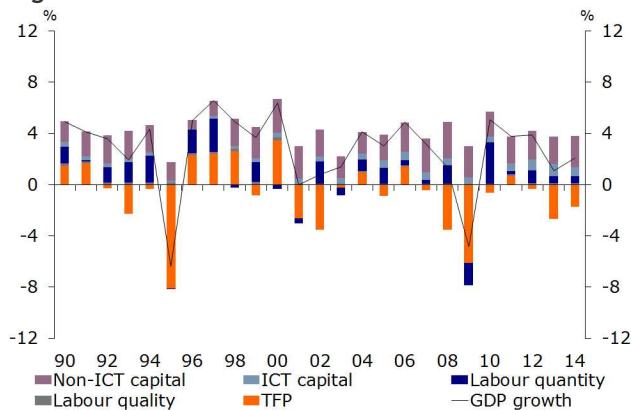
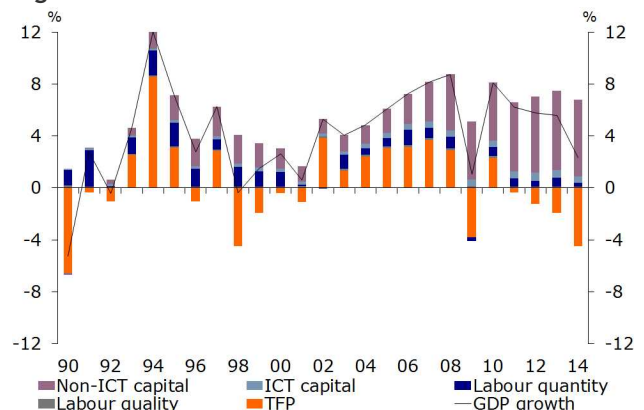


Figure 23: Peru



## Colophon

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Abbreviations for sources: WEO: World Economic Outlook, EIU: Economist Intelligence Unit, IMF: International Monetary Fund, WEF: World Economic Forum, DOTS: Direction of Trade Statistics

Abbreviations used for countries: AR: Argentina, BZ: Belize, BO: Bolivia, BR: Brazil, CL: Chile, CO: Colombia, CR: Costa Rica, EC: Ecuador, SV: El Salvador, GT: Guatemala, GY: Guyana, HN: Honduras, MX: Mexico, NI: Nicaragua, PA: Panama, PY: Paraguay, PE: Peru, SR: Suriname, UY: Uruguay, VE: Venezuela

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Editors-in-chief:

[Allard Bruinshoofd](#), head of International Research, Economic Research

Graphics: Selma Heijnekamp and Reinier Meijer

Production coordinator: Alexandra Dumitru and [Christel Frentz](#)

**Author(s)**

**Herwin Loman**

International Research (IR)

☎ +31 30 21 31105

✉ [H.Loman@rn.rabobank.nl](mailto:H.Loman@rn.rabobank.nl)