



REFORM AND TRANSITION IN EMERGING MARKETS

25 Years of Inflation Targeting: Lessons for the Future

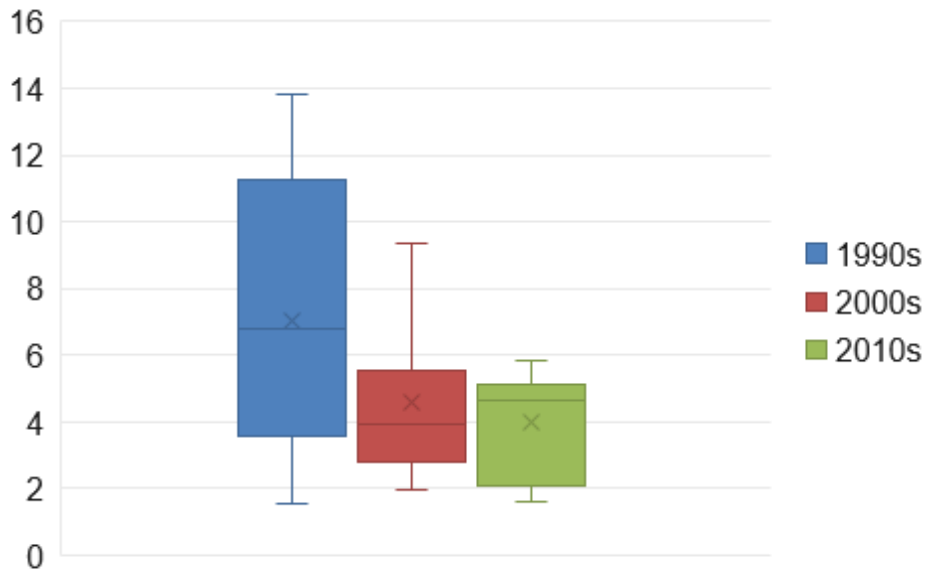
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Growth and inflation

Average inflation rate for panel of emerging economies, %



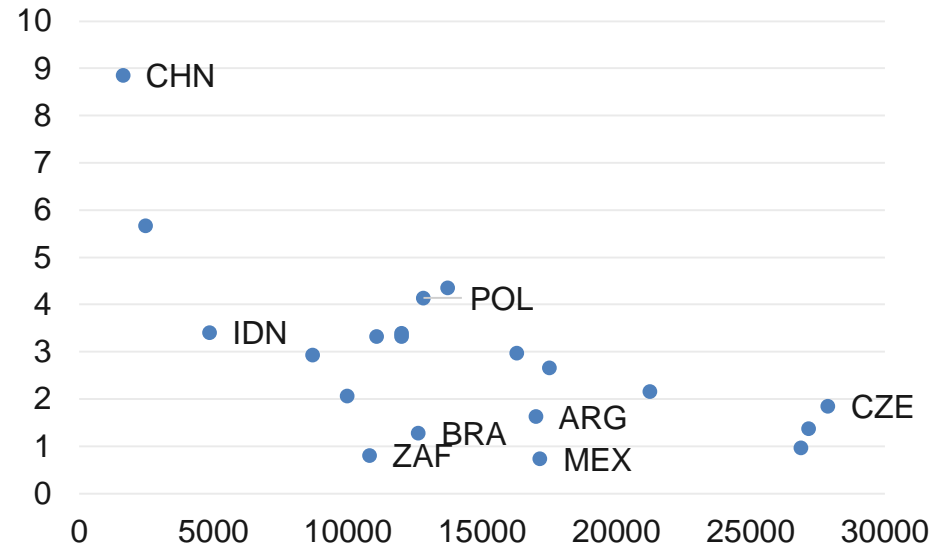
Some emerging and transition economies have experienced higher inflation than typical in advanced economies

- Growth brings powerful price dynamics
- These can be managed while keeping low and stable inflation
- Growth is essentially driven by other factors



Income tends to convergence across countries

Average growth rates of GDP per capita in constant PPP (%)
and initial level of real incomes in 1990

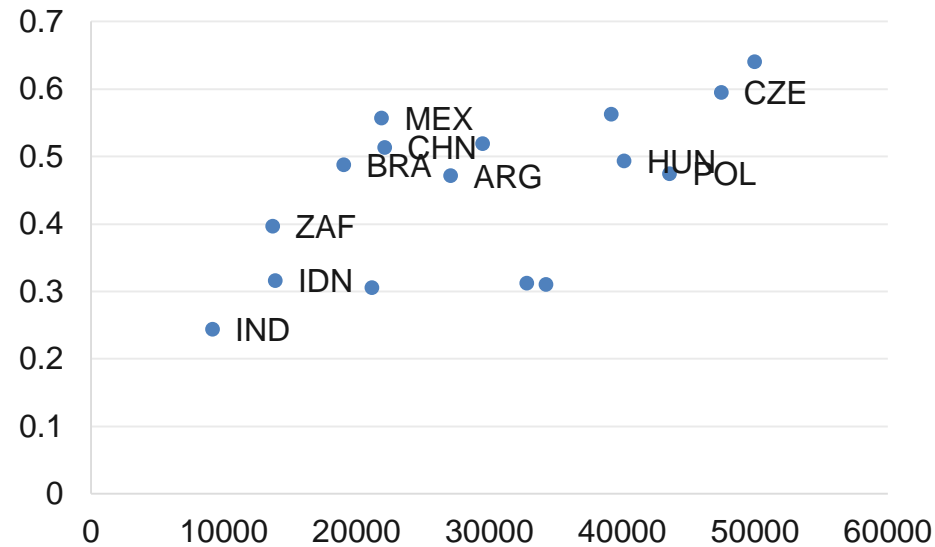


- Countries with lower GDP per capita tend to grow faster along a convergence path
- This relationship only holds on average and is conditional

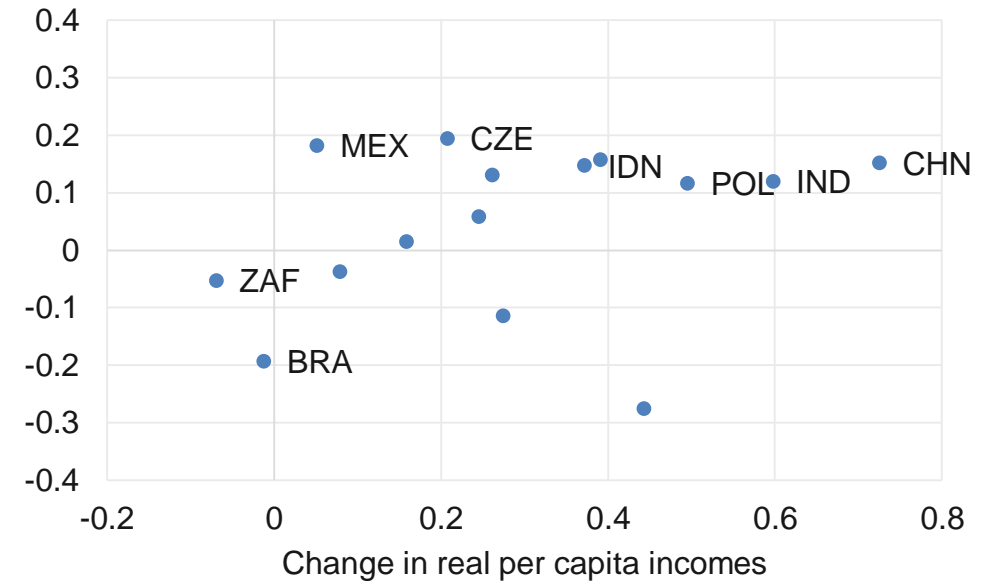


This is associated with a convergence in price levels

PPP conversion factor and GDP per capita (2021)



Changes in PPP conversion factor to GDP per capita in %, 2021 compared to 1990



- Prices are lower in lower income countries in cross-section
- Price levels converge as economies catch up in time series
- These relationships holds on average, but there are large deviations



The Balassa-Samuelson effect

$$\dot{q} = \dot{q} + \gamma [(\dot{p}_{NT} - \dot{p}_T) - (\dot{p}_{NT}^* - \dot{p}_T^*)]$$

$$\dot{p} = \gamma \dot{p}_{NT} + (1 - \gamma) \dot{p}_T$$

$$\dot{p}^* = \gamma \dot{p}_{NT}^* + (1 - \gamma) \dot{p}_T^*$$

$$q = s + \dot{p} - \dot{p}^*$$

- Standard B-S model explains price convergence through faster productivity growth in TG sector combined with PPP holding in TGs but not NTG sector

$$\dot{w} = \dot{p}_{NT} * \dot{\theta}_{NT} = \dot{p}_T * \dot{\theta}_T$$



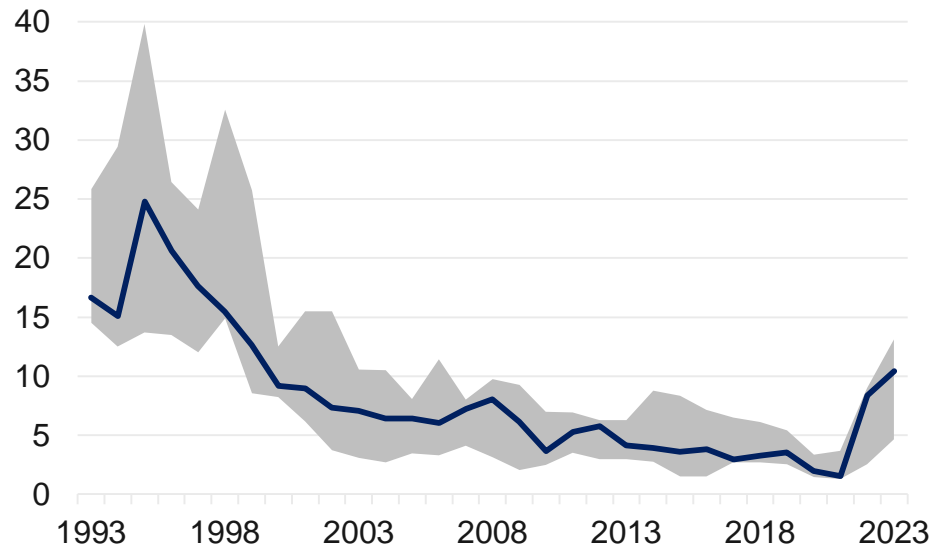
The price dynamics associated with growth are complicated

- The literature is somewhat mixed as to how well this basic model holds (Devereux, 2014)
- A number of other dynamics play a role:
 - Improvements in the terms of trade (imperfect substitutability of TGs)
 - Gains in quality/moving up the value chain
 - Unit labour costs
 - Convergence in consumption baskets
- Persistent deviations from PPP are prevalent

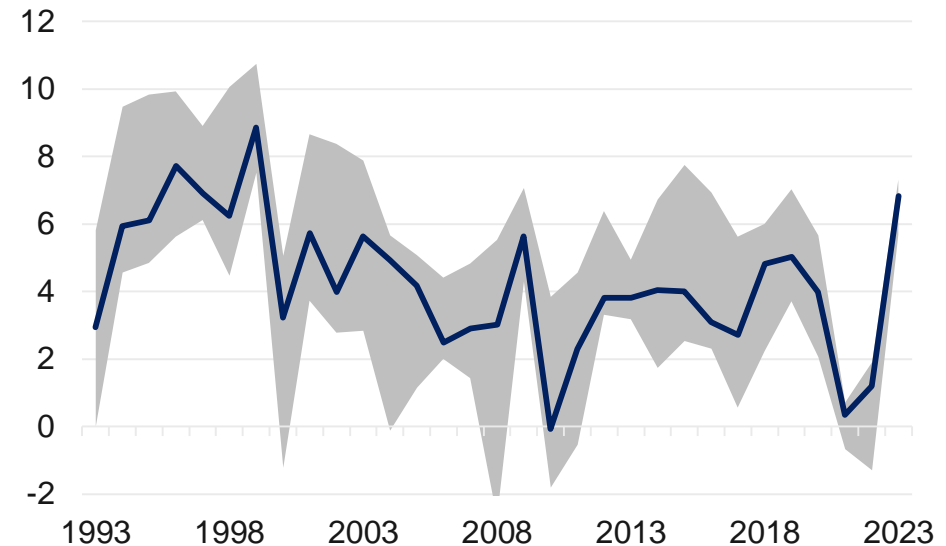


Price dynamics are further influenced by intertemporal factors and capital flows

Nominal short-term interest rates. %



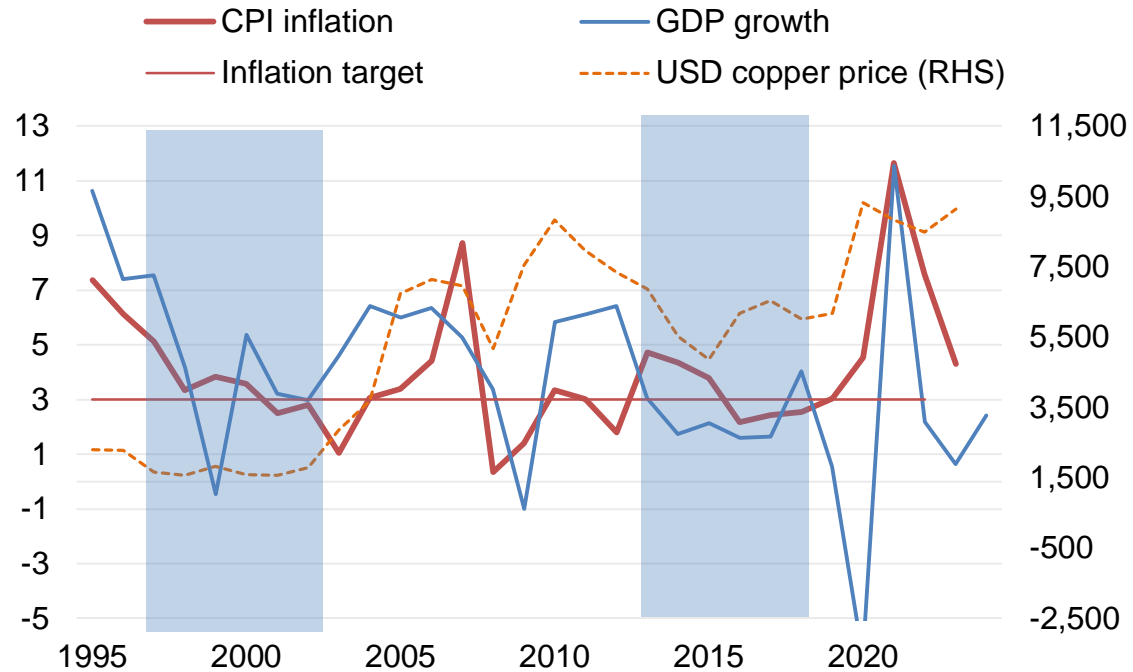
Real short-term interest rates, %



- Nominal interest rates have fallen and converged
- This reflects lower inflation and real rates, as well as lower risk premia
- There are large and persistent deviations from UIP in nominal and real terms



Example – price developments in Chile



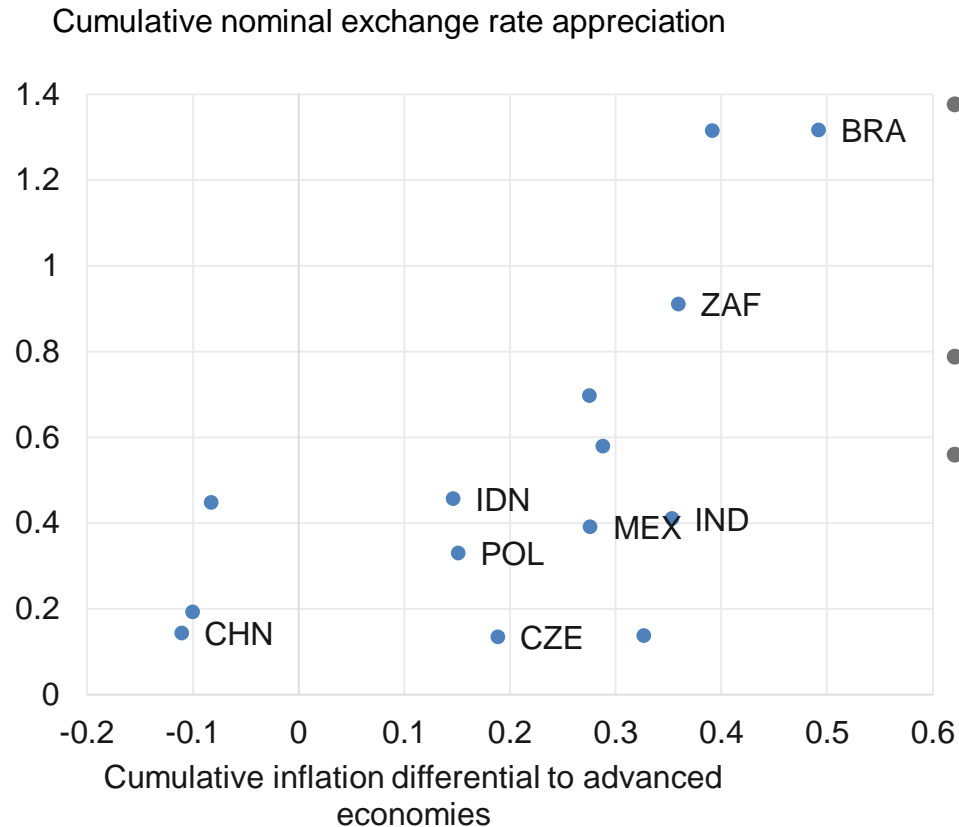
	1997 to 2003	2013 to 2019
GDP per capita	5.3	4.6
CPI inflation	3.5	3.3
Nominal exchange rate appreciation	5.2	1.2
Real exchange appreciation	5.3	2.7
Increase in PPP price level	1.4	2.2
Improvement in terms of trade	1.1	0.1
Productivity increase	1.7	0.1
Increase in GDP deflator relative to CPI	-0.3	0.7

- Chile achieved inflation of around 3% during periods of sustained growth
- However, underlying real economy and prices developments have been complex



Nominal exchange rate appreciation can accommodate growth

Changes in nominal exchange rate and CPI price level, %



- Nominal exchange appreciation has typically accounted for most of the adjustment of the real exchange rate
- Higher inflation has played a role
- Potential internal and external imbalances from exchange and policy misalignment



Policy tools for successful convergence

Credible monetary policy regime

Appropriate external arrangements

Well-anchored fiscal policy

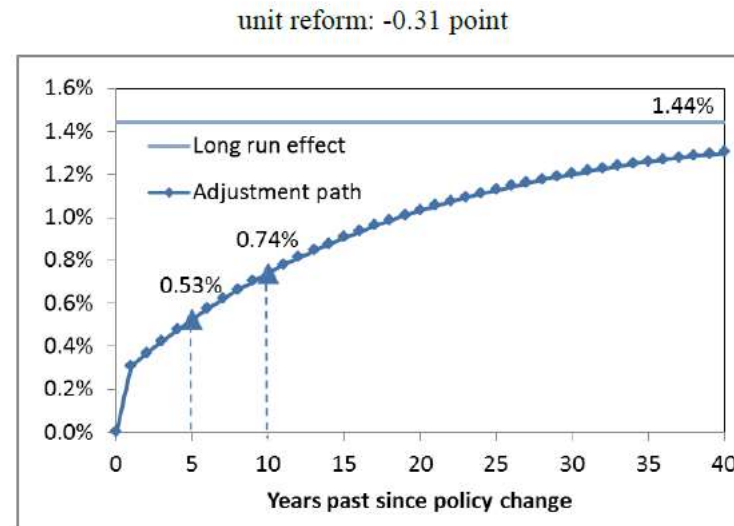
Wage, price flexibility

Social coordination



Reforms that induce productivity gains can help to keep inflation low...

Impact of a unit reform of Energy, Transport and Communication Regulation (ETRC) indicator on TFP



Source: Egert, B. and P. Gal (2016), "The quantification of structural reforms in OECD countries: a new framework", OECD Economics Department Working Papers No. 1354.

- Positive supply-shock raises capacity
- Creates space for favourable competitiveness developments with rising wages



...and have a range of other effects on supply and demand

Estimated effects of structural policies on saving, investment and current accounts

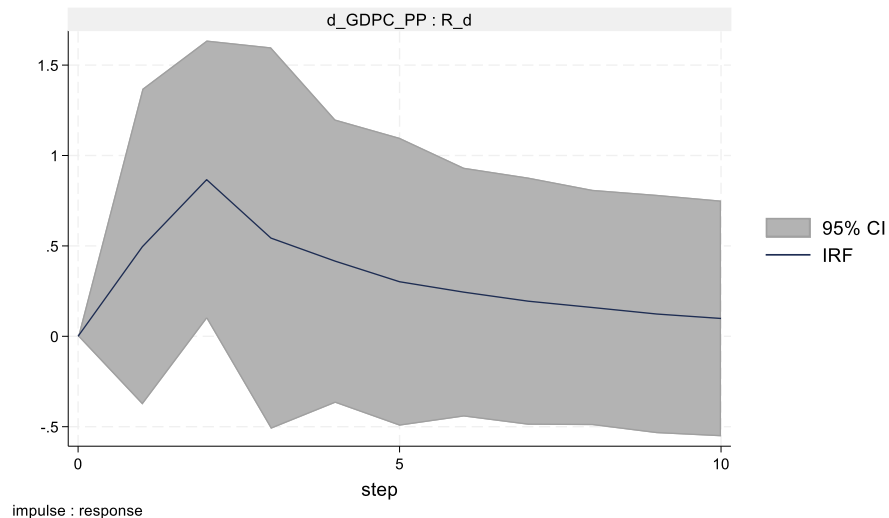
	Total saving	Total investment	Current account
Macroeconomic conditions			
Increase in productivity growth	+	+	-
Increase in the user cost of capital		-	(+)
Increase in the growth rate of working age population		+	-
Increase in the rate of change of the terms of trade	+		+
Increase in the real rate of interest	-		(-)
Increase in the old-age dependency ratio	-		-
Increase in the youth dependency ratio	+		+
Increase in government net lending	+		(+)
Structural policies			
Improvement in coverage/quality of social welfare system	-		-
Increase in retirement age	-		(-)
Lowering of employment protection	0	-	+
Product market deregulation		+	(-)
Financial market deregulation	0/-	0/+	(0/-)

Source: Kerdrain, C., I. Koske and I. Wanner (2010), "The Impact of Structural Policies on Saving, Investment and Current Accounts", OECD Economics Working Paper No. 815



Simple empirical analysis of the impact of reforms

Impulse response function for reform shock on GDP per capita



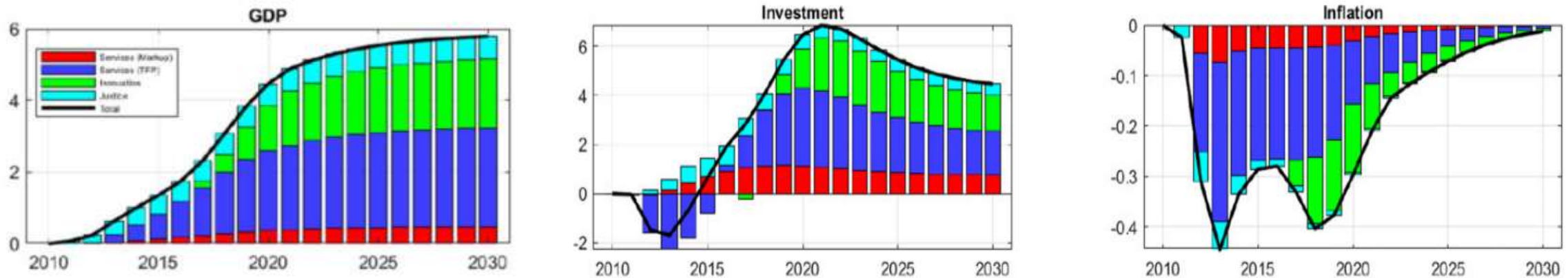
- It is challenging to identify the impact of reforms
- There is a lagged effect of reforms on growth, peaking after a couple of years
- There is no clear evidence that reform shocks impact inflation

Simple VAR analysis using Alesina et al. (2020) structural reform measures for G-20 EME, 4 major CEE and 2 SE Asian economies 1995 to 2014



Case study - productivity-enhancing reforms in Italy

Estimated impact of services, innovation and civil justice reforms in Italy



Source: Ciapanna et al. (2023). "The Macroeconomic Effects of Structural Reforms: an Empirical and Model-based Approach", Economic Policy

- Ciapanna et al. (2023) (translate impact of reforms into OECD indicators, estimate TFP and mark-up effects on STAN industry data and derive macroeconomic effects through a DSGE model)
- Growth increases over time, but inflation is lower in the early years as lower mark-ups and innovation raise supply

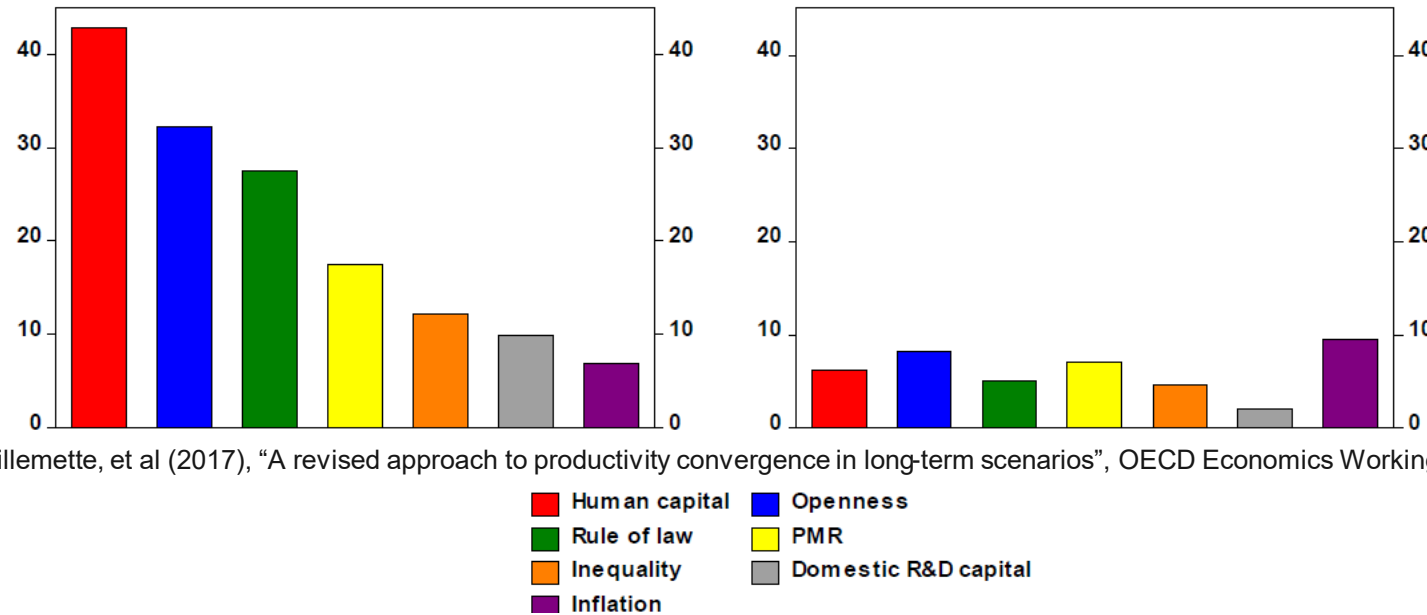


Long-term growth is driven by structural reforms

Per cent increase in equilibrium labour efficiency following an improvement in the determinants

1 standard deviation of country cross-section

Mean absolute 5-year change



Source: Guillemette, et al (2017), "A revised approach to productivity convergence in long-term scenarios", OECD Economics Working Paper No. 1385

- Growth is primarily driven by structural factors and policies
- Low and stable inflation can help



Reform path for South Africa



Macro policies

- Maintain a progressive consolidation strategy

Productivity

- Privatised state-owned enterprises operating in competitive markets
- Align sector regulators and the Competition Commission to strengthen competition policies
- Improve the enforcement of national and foreign corruption sanctions
- Increase and accelerate the procurement of renewable electricity
- Reduce the corporate income tax rate and broaden the base
- Raise the standard VAT rate

Labour

- Upgrade the basic skills by increasing the quality of primary and secondary schools
- Streamline collective bargaining
- Strengthen the social transfer system



Key points

- Growth brings powerful price dynamics
- These can be managed while keeping low and stable inflation
 - Inflation and growth are not strongly linked in the long-run
 - Large relative price adjustments are consistent with low inflation
- Growth is essentially driven by structural factors



Selected references

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