Nominal Income Targeting versus Inflation Targeting in Advanced and Emerging Economies

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Key points

1. The optimal choice of a monetary and fiscal framework is partly determined by
    - the characteristics of an economy
    - the nature (severity and persistence) of domestic and foreign shocks.
2. The theoretical and empirical evidence is that no fiscal or monetary framework dominates in all cases
    - But some are much worse than others on average

Key points

3. Given that the future is inherently uncertain it is important to balance **regime clarity** with **transparent flexibility** when needed.
4. There is enormous leverage by households and governments in many economies due to low interest rates and low inflation – this has greatly increased vulnerability and risk
5. Nominal income targeting is the most suitable monetary framework going forward

Overview

- Global Context
- Monetary Policy Regimes
- Conclusion

The Global Context

- The world economy is being fundamentally transformed by the income growth of large emerging economies (China, India, Brazil)

- Individual economies are also going through longer term transformation (excessive debt, demographic change)

The Global Context

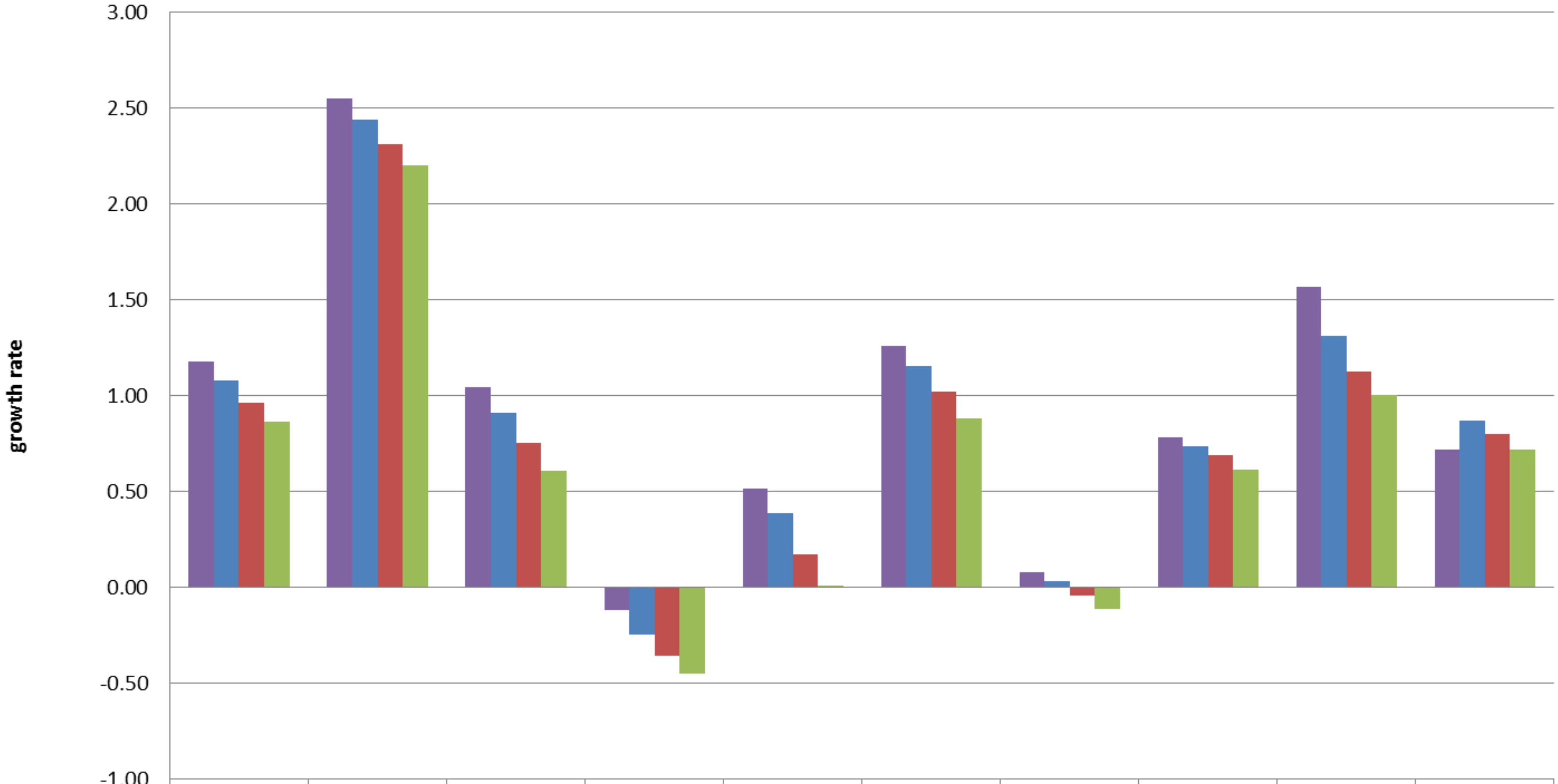
- Long term trends are impacting on short term rigidities in many economies
- Policies have been aimed at business cycle when they should have been aimed at structural adjustment

Likely Future

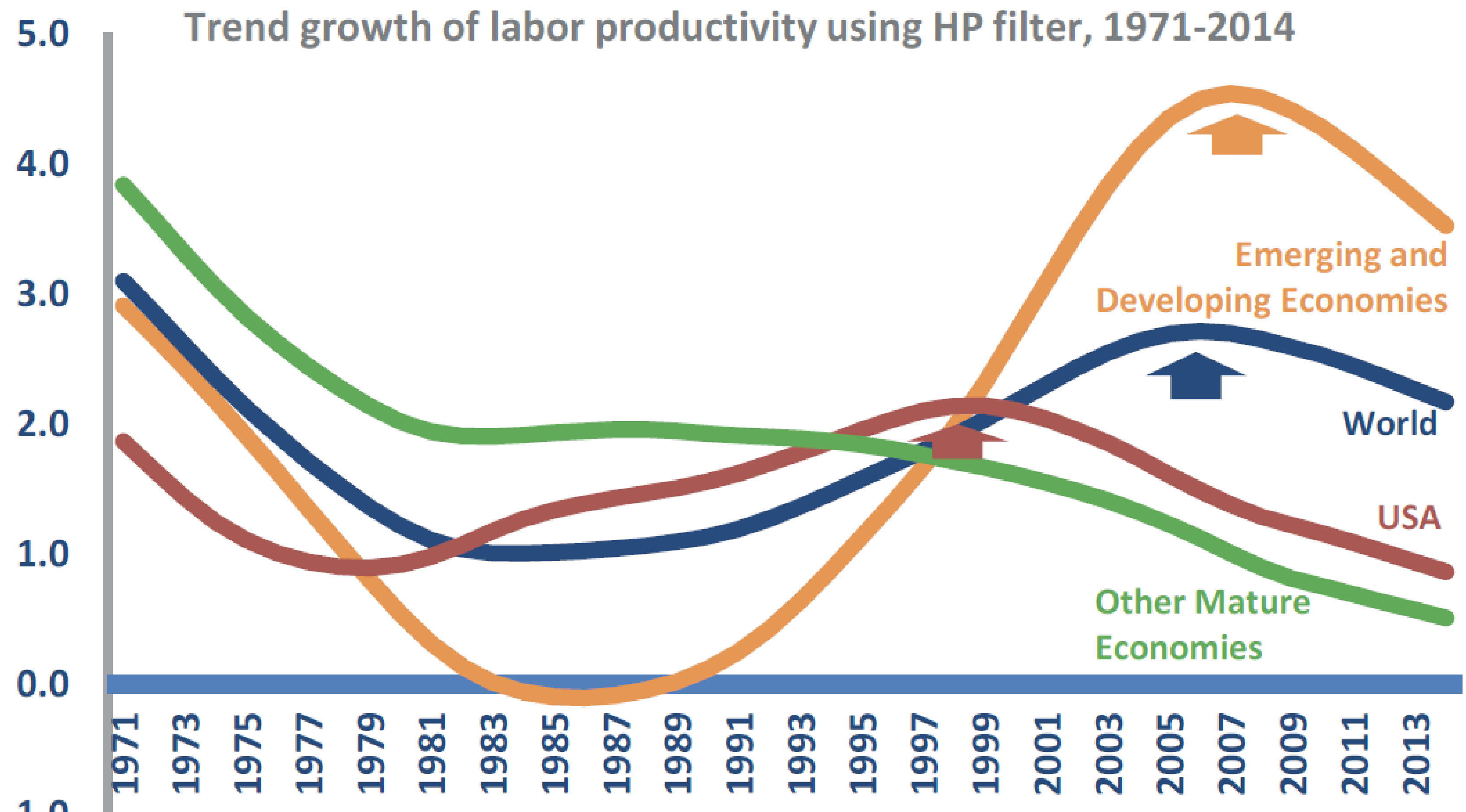
- Medium term
    - Global Demographic Adjustment
    - Global Productivity slowdown
    - Problems with Fiscal sustainability
    - Global Policies addressing Climate Change
    - Pandemics
- Shorter term
    - President Trump Monetary/Fiscal mix
    - Weak Global Investment
    - Contradictions in Europe
    - Structural adjustment in China
    - Japanese policy experiment
    - Geopolitical tensions

Figure 1: Population Growth Rates 2010-2030

Source: UN Population Projection 2015 Revision, Medium Fertility



	WORLD	AFRICA	ASIA	Japan	China	India	EUROPE	NORTHERN AMERICA	Australia	New Zealand
	1.18	2.55	1.04	-0.12	0.52	1.26	0.08	0.78	1.57	0.72
2010-2015	1.18	2.55	1.04	-0.12	0.52	1.26	0.08	0.78	1.57	0.72
2015-2020	1.08	2.44	0.91	-0.24	0.39	1.15	0.04	0.74	1.32	0.87
2020-2025	0.97	2.31	0.75	-0.36	0.17	1.02	-0.04	0.69	1.13	0.80
2025-2030	0.86	2.20	0.61	-0.45	0.01	0.88	-0.11	0.62	1.01	0.72



Note: Trend growth rates are obtained using HP filter, assuming a λ=100.
Source: Source: The Conference Board Total Economy Database™, May 2015

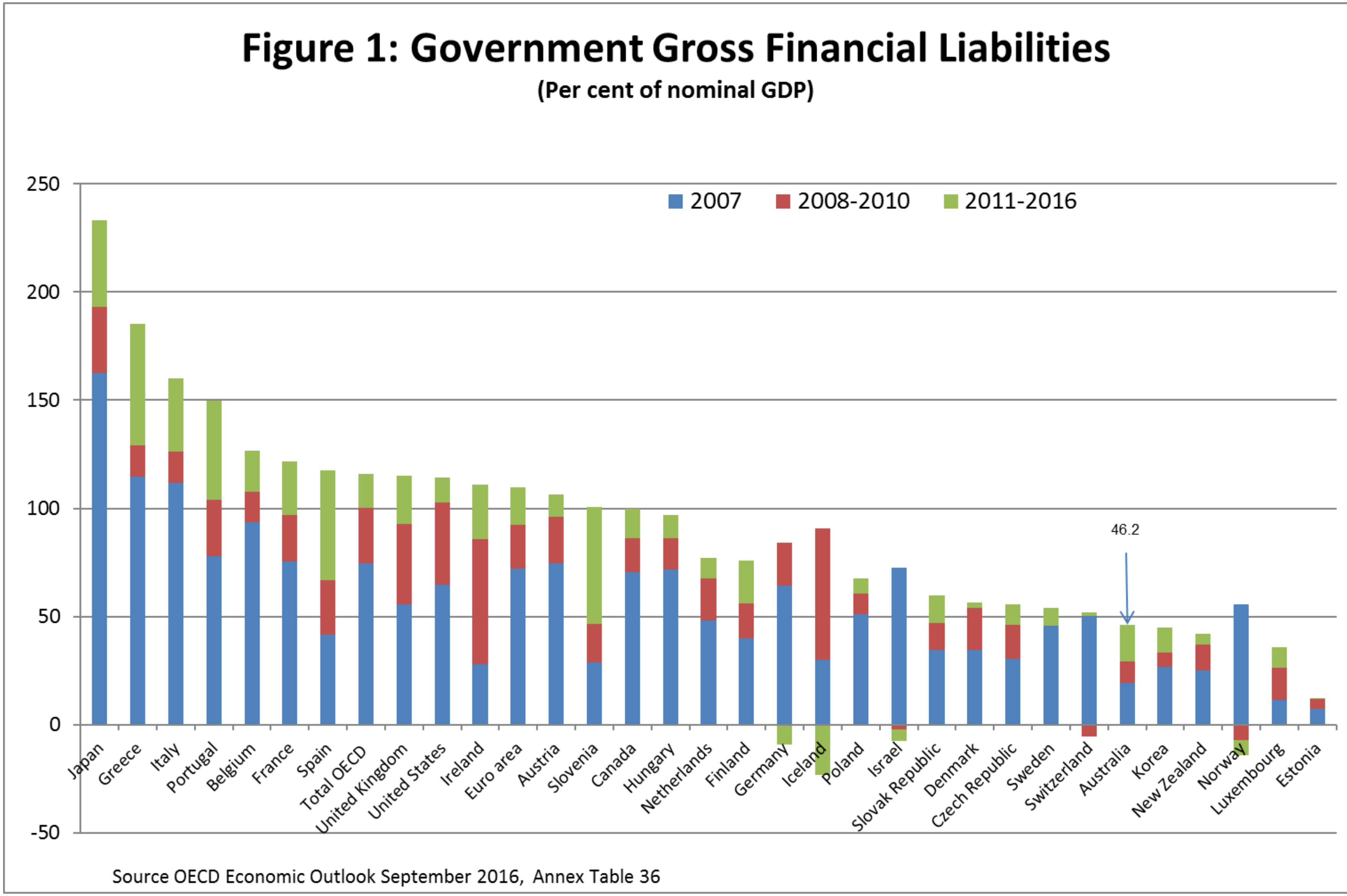


Figure 1: Government Gross Financial Liabilities
(Per cent of nominal GDP)
250
200
150
100
50
0
-50
2007
2008-2010
2011-2016
46.2
Japan
Greece
Italy
Portugal
Belgium
France
Spain
Total OECD
United Kingdom
United States
Ireland
Euro area
Austria
Slovenia
Canada
Hungary
Netherlands
Finland
Germany
Iceland
Poland
Israel
Slovak Republic
Denmark
Czech Republic
Sweden
Switzerland
Australia
Korea
New Zealand
Norway
Luxembourg
Estonia
Source OECD Economic Outlook September 2016, Annex Table 36

Why weak Global Investment?

- With a surprise fall in productivity and worsening labor supply and higher risk
  - Existing capital stock too high so cut investment immediately to gradually reduce the capital stock
  - Demand weak because of lack of investment
  - Supply side expected to contract reinforcing the negative supply shocks
- Central banks have distorted financial markets so pricing of assets unclear (riskier than priced)

Why weak Global Investment?

- Due to high public debt rations, large fiscal consolidation is needed at some point in the future
  - so future taxes expected to rise (on who?) and/or
  - future government induced spending recession
- Hard to see how changing nominal interest rates will sufficiently offset these deep fundamental problems

Which Monetary Regime is desirable under this future?

Inflation Targeting or Nominal Income Targeting?

Is inflation targeting still useful?

- Macroeconomic policy regime should deal with the likely future scenarios rather than focus on the past
- The core objective of monetary should be to promote macroeconomic stability rather than price stability

Inflation targeting

- Some argue that inflation targeting framework works and only needs to be refined
- Inflation targeting was appropriate when the goal was to reduce inflation from an inflationary world since 1990
  - but is this relevant today?
- Substantial theoretical and modeling evidence that inflation targeting is not the best regime for handling the likely shocks facing the global economy

Bryant Hooper Mann study

- Bryant R., Hooper, P., and C. Mann (1993) *Evaluating Policy Regimes: New Research in Empirical Macroeconomics*, Brookings Institution
- D.W. Henderson and W. McKibbin (1993) "An Assessment of Some Basic Monetary Policy Regime Pairs: Analytical and Simulation Results from Simple Multi-Region Macroeconomic Models" in BHM(1993)

What matters?

- GDP per capita?
- Consumption per capita?
- Income (GNP or GNI) per capita?
- Wealth per capita?
- Unemployment rate?
- Inflation rate?

GNP versus GDP

- GDP is the market value of all final production in a country
- GNP is the market value of all final production produced by residents
  - GDP plus net income transfers from abroad

Nominal Income targeting

- Why nominal income growth will matter in the coming decades?
  - sustainability of high public and private debt to income ratios will need higher nominal income growth than in the past

  - Inflation mattered when going from a high inflation world to low inflation world post Volker, but that is looking backwards

Nominal Income targeting

- Measurement and understanding
  - Inflation is an index which needs to be constructed
    - Which inflation rate (traded, non-traded, CPI, PPI)?
    - What weights
  - Nominal Income is actually measured and can be measured almost in real time with big data

Nominal Income targeting

- Expectations
  - Inflation expectations persistently deviate from actual across many countries
  - Need more research on nominal income growth versus inflation as a a better nominal anchor for expectations

Nominal Income targeting

- Closer to actual target
  - Most inflation targeting regimes allow for real output variability
  - Taylor rules
  - Fed policy
  - RBA inflation over the cycle
- Better to be explicit rather than allow arbitrary discretion
  - current Fed problem

Nominal Income targeting

- Asset price bubbles
  - Nominal income targeting captures this to the extent that asset bubble cause wealth effects
  - Inflation target advocates still debating how to adjust inflation in goods prices to asset prices

Nominal Income targeting

- Forecastability
  - Inflation framework needs inflation forecasts which requires some estimate of output gaps
  - Nominal Income forecasting involves forecast of GDP inflation, real GDP and the covariance of inflation and real GDP
    - If negative covariance (i.e. supply shocks) then likely to be better forecast

Common misunderstanding

- Targeting Nominal GDP growth is not the same as an equal weight on inflation and real GDP growth
  - if there is covariance between inflation and real GDP growth
  - the CPI tends to have more exchange rate variability than the GDP deflator

Conclusion

- The world economy and particularly Australia likely to be facing
  - Productivity shocks (global and local)
  - Commodity price shocks
  - Global fiscal consolidation
  - Changes in global and local asset prices
  - Shift in country risk premium
  - Shift in climate policy that generate supply shocks

Conclusion

- All these shocks are better handled with a well designed nominal income growth target
- Key research questions
  - target growth or the level of nominal GDP
  - Is inflation or nominal growth more reliably
    - Measured
    - Forecasted
    - Understood as a nominal anchor

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