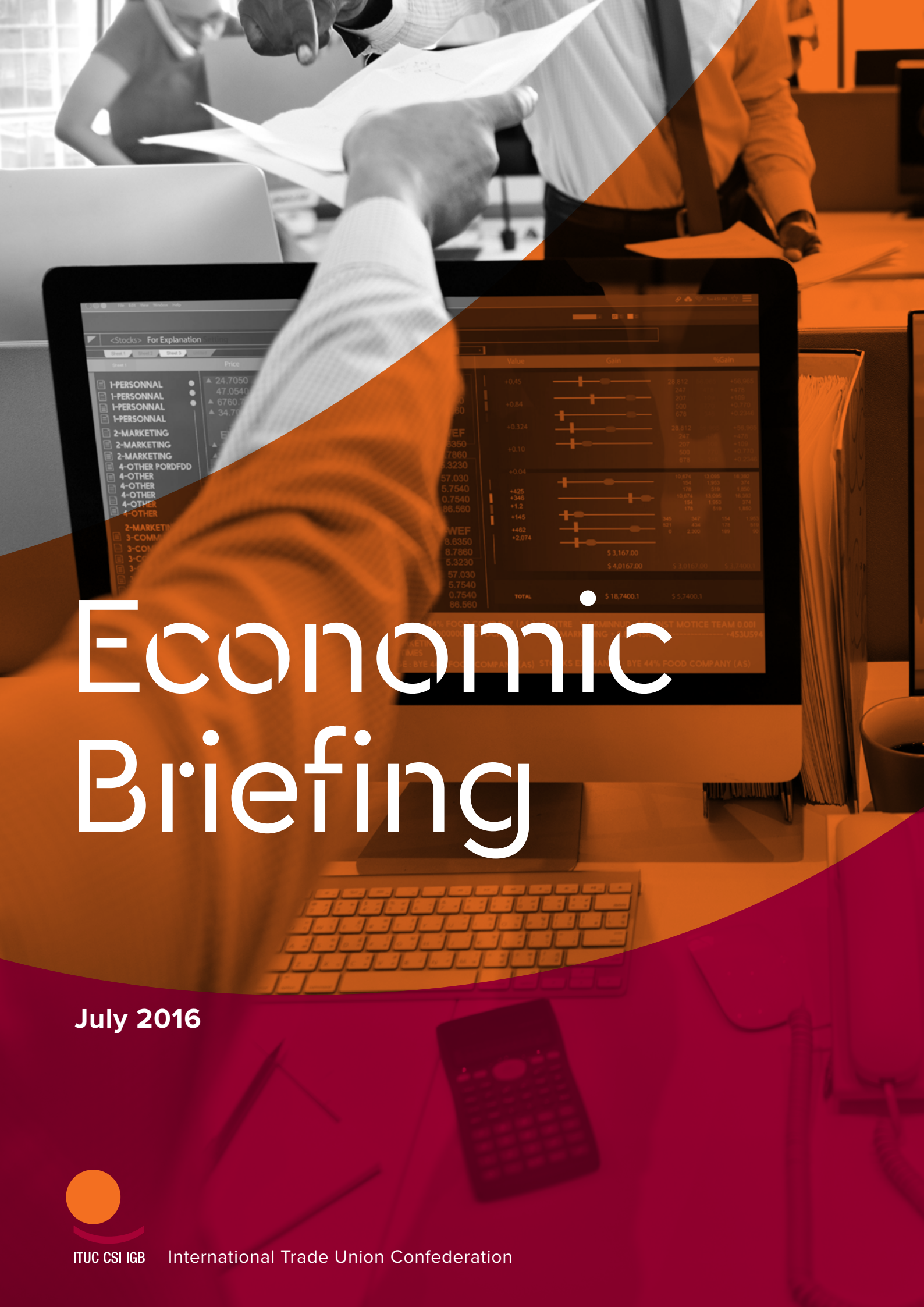


Economic Briefing

July 2016

ITUC CSI IGB International Trade Union Confederation

Contents

Introduction

2016 was already proving to be the most dangerous year economically for workers since 2009, even before the vote on 23 June by the UK referendum vote to leave the European Union. The OECD and World Bank mid-year forecasts showed that global GDP growth had stalled. There is now a real risk of a Brexit-led recession compounding the situation. Workers in the G20 and beyond cannot afford a recession and a renewed rise in unemployment. The longer unemployment and underemployment remain elevated or continue to rise, the greater the risk that it becomes "structural" due to scarring effects. For young people, in many countries the risk of a "lost generation" is real. Governments now have to undertake the coordinated action to raise public investment and wages that even the international institutions are beginning to realise is necessary.

Most of this Economic Briefing was written before the decision on 23 June, but subsequent events lend urgency to our proposals. The first chapter, written by Carolin Vollmann, ITUC economist, shows that the current policy stance of relying upon monetary policy alone to keep the global economy afloat is not working. Fiscal austerity and the weakening of collective bargaining institutions through structural "reforms" have suppressed wages and living standards. The policy mix of loose money but contractionary fiscal and wage policy has contributed to the risk of deflation. Weak wage dynamics are also heavily complicating the task of central banks in re-anchoring inflation expectations, as expressed by several central bankers themselves.

The second chapter written by Ronald Janssen, TUAC senior economist, reviews the shift of policy in the latest OECD Economic Outlook. The OECD's Outlook comes at a time economies are still struggling in connecting with a decent growth recovery. Meanwhile, major economic regions (Euro Area, Japan) are facing deflationary risks as inflationary expectations have become unanchored.

Confronted with these realities, the OECD is now recognising at last that austerity has to be replaced by an active fiscal policy to support demand. The OECD is proposing coordinated increase in public investment. And while the OECD does not take the next step of also suggesting a strengthening of wage formation systems themselves (after the recent structural reform policy inflicted a serious weakening of collective bargaining institutions in several OECD economies), it does point to the fact that weak wage growth dynamics would hold back the recovery even more.

Combatting the risk of renewed crisis by creating quality jobs must become the central priority of the G20 meetings in China. Labour Ministers meet in July in Beijing and Leaders in September in Hangzhou.

Ronald Janssen argues in the third Chapter of the briefing that structural reform policies that depress demand in the short term must be halted and superseded by a new agenda aiming at stronger ,well-designed labour market institutions including trade unions and collective bargaining and the introduction of minimum living wages. This is the message that is missing from the recently published OECD Employment Outlook.

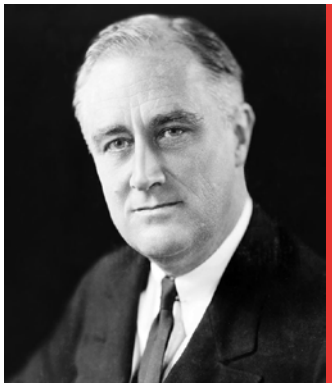
Unions at the L20 in Beijing and beyond are pressing the Labour and Employment Ministers to send a strong message to the G20 Leaders Summit so as to achieve tangible policy results so as to create quality jobs.

John Evans,
General Secretary TUAC

Chapter 01:
Heading toward the iceberg - the failure of monetary policy

Summary

Neoliberal policies have returned boldly since 2010. Part of this neoliberal approach is the fundamental belief that monetary policy is key and that interest rates are the critical tool to lead the economy back to growth. Eight years into the crisis, after years of quantitative easing and now also negative interest rates in lead economies, the outcomes reveal the flaws of this belief. Despite the obvious, governments seem to be resistant to reality and more inclined to risk the fragile stability of the global economy rather than change policy.



"It is common sense to take a method and try it.
If it fails, admit it frankly and try another.
But above all, try something."

Franklin D. Roosevelt

1. Global and regional growth forecasts

Table 1: Growth forecasts for 2015 and 2016 in percent (change from previous forecast)

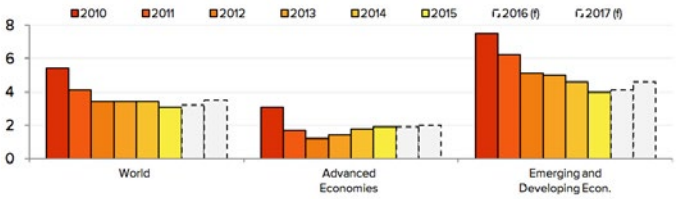
Source	Month	Global		Developing and Emerging Economies		Advanced Economies	
	2016	2016	2017	2016	2017	2016	2017
IMF	April	3.2 (-0.2)	3.5 (-0.1)	4.1 (-0.2)	4.6 (-0.1)	1.9 (-0.2)	2.0 (-0.1)
World Bank	January	2.9 (-0.4)	3.1 (--)	4.8 (-0.4)	5.3 (--)	2.1 (-0.3)	2.1 (--)
OECD	February *Nov. 2015	3.0 (-0.3)	3.3 (-0.3)	--	--	OECD: 2.2* (-0.3) EA: 1.8* (-0.3)	OECD: 2.3* (--) EA: 1.9* (--)
EU Commission	February	3.3 (-0.6)	3.5 (--) 2016 2017	--	--	EU: 1.9 (-0.1) EA: 1.7 (-0.1)	EU: 2.0 (-0.1) EA: 1.9 (0.0)
				Developing	Transitioning		
				2016 2017	2016 2017		
UN DESA	January	2.9 (-0.2)	3.2 (--)	4.3 4.8 (-0.5) (--)	0.8 1.9 (-0.1) (--)	2.2 (0.0)	2.3 (--)

Sources: IMF (2016) World Economic Outlook; World Bank (2016) Global Economic Prospects; OECD (2015) Economic Outlook, and OECD (2016) Interim Assessment; EU Commission (2016) European Economic Forecast; UN DESA (2016) World Economic Situation and Prospects 2016.

All international institutions have revised their forecasts for global growth downward in 2016 (see Table 1). Alongside the increasingly bleak outlook comes the understanding that the likelihood of achieving the (reduced) predicted growth has declined as well. Risks have turned into uncertainties.[1] The forecasters now recognize that their hope that emerging markets would sustain growth was false as the aggregate growth rate of those countries continued its constant decline since 2010 (see Figure 1). Also in OECD countries the rate of growth in 2015 has been the lowest for years and is not expected to pick up in 2016 and 2017.

1 The difference between risks and uncertainty is explained by Pablo A. Guerron-Quintana by tossing a coin: accordingly risk occurs if an event is predictable in the likelihood of occurrence, i.e., tossing a (fair) coin the outcome for heads and tail is 50 to 50; uncertainty occurs when this probability is unknown i. e. tossing a manipulated coin without knowing what the manipulation looks like; see Pablo Guerron Quintana (2012) “Risk and Uncertainty”, Philadelphia Fed, p. 2.

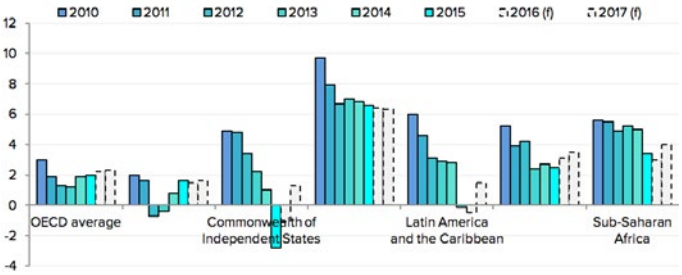
Figure 1: There is no return to growth



Source: Own depiction based on data from the IMF (2016) World Economic Outlook, April.

Figure 2 shows the increased divergence of growth in 2015 across regions. In Eastern Europe and Latin America economic growth collapsed due to economic struggles in Russia and Brazil and falling commodity prices. The Sub-Saharan African region was affected by slowing demand for commodities and reduced financial flows, which reduced growth from 5.0% in 2014 to 3.4% in 2015. In Asia the uncertainties of China's future growth reduced the projections for the region and the world economy. Advanced economies of the OECD on average sustained their low growth rate from 2014. Commodity importers did not benefit from low prices, in large part because low commodity prices reflected their weak demand rather than increased supply.

Figure 2: The divergence of growth patterns across regions has widened

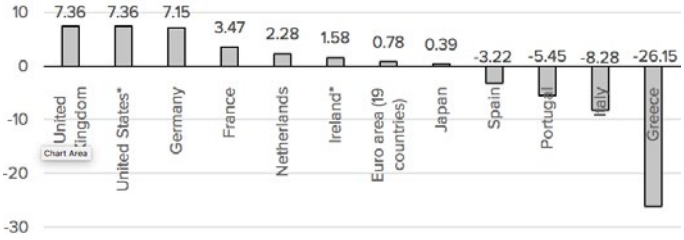


Source: Own depiction based on data from the IMF (2016) World Economic Outlook, April; and OECD (2015) Economic Outlook, October.

There is wide agreement that the global economic situation has changed to the worse while amplifying uncertainty for the future. Commodity prices particularly oil prices have continued to fall. Crude oil hit another record low in January at USD 30 USD per barrel and is currently traded at USD 49 (May 16, 2016).[2] The slowdown of China and the overproduction of copper have hit the global markets, reducing prices by 27% within one year.[3] Political tension in the Middle-East and political inaction of key governments have reduce the likelihood that international cooperation will improve the situation.

The difference of growth patterns in real terms (see Figure 3) shows that the European crisis remains unsolved. It took the Euro area almost a decade to get back to the pre-crisis level of GDP – a lost decade for employment and GDP growth.

Figure 3: Change of GDP in real terms between 2007 and 2015



Source: OECD (2016) database. - *Data refer to 2014

2. Objective and functioning of central banks

The only actors that have continuously responded to the sluggish growth are central banks while governments have been inactive in the majority since 2012. The exception here was the European Central Bank (ECB), with delayed or even contractionary policy. Before evaluating the outcome of specific monetary policies in the context of the broader economy, it is worthwhile looking into the role and function of central banks and how they have evolved over time.

In general the primary objective of central banks is to assure price and financial stability as lender of last resort for banks and governments and support achieving and maintaining full employment and economic growth. The objectives and priorities vary depending on the time and historic context of their creation (see Figure 4).[4] The United States Federal Reserve for example has a dual mandate of "maximum employment" and "stable prices and moderate long-term rates"[5] while the ECB's mandate is much narrower focused on price stability.[6]

2 Dave Shellock (2016) "US Stocks rise as Brent oil nears $50", Financial Times, May 16, available at: http://www.ft.com/intl/cms/s/0/e413345e-1b13-11e6-b286-cddde55ca122.html#axzz48qbFkVbR

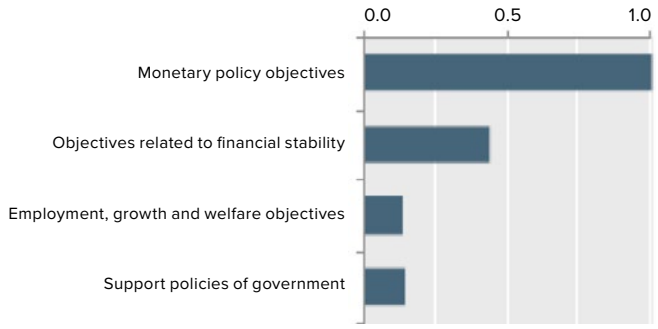
3 Financial Times (2016) Commodity market data.

4 For a brief history see Bank for International Settlement (2009) Issues in the Governance of Central Banks, May, p. 19/20, available at: http://www.bis.org/publ/othp04_2.pdf.

5 Federal Reserve bank of Chicago (2016) "The Federal Reserve's Dual Mandate", May 9, 2016.

6 ECB (2016) "Objective of monetary policy", available at: https://www.ecb.europa.eu/mopo/intro/objective/html/index.en.html

Figure 4: Central bank objectives in central bank laws
Per cent of 47 central banks, index

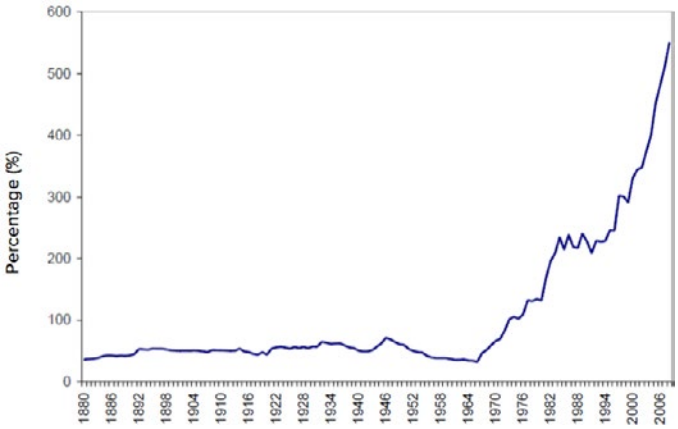


Source: Bank for International Settlement (2009) Issues in the Governance of Central Banks, May, p. 21.

The role of Central Banks changed over the last decades. After the Great Depression through around 1970 Central Banks acted as expert advisory groups to the Finance Ministry. Monetary policy was determined to a large extent by governments with central banks having a much more constrained room for maneuver. After the Bretton Woods system broke down in the early 1970s and financial integration accelerated through international trade and improvement in technology, central banks gained more independence from governments and finance ministries.[7] This is reflected in a change of wording in treaties of central banks. Older statutes focus on the functioning of central banks while independent objectives are included in more recent treaties. [8] The shift to more independence and the definition of objectives resulted in a narrow focus on monetary and financial issues (see Figure 4) such as a moderate inflation rate and support of the financial sector while giving little attention to the link to employment and the real economy.

As governments gave banks greater independence in their functioning, financialisation of the banking sector intensified. In the UK the assets-to-GDP ratio increased by over 1,000% between the mid-1960s and the mid-2000 (see Figure 5). Even earlier the capital-to-equity ratios declined (see Figure 6) based in parts on a broadening of accepted collaterals by central banks which drove up returns on equity. In the UK for example, returns on equity in the banking sector averaged below 10% between 1920 and 1970 with low volatility, comparable to investment returns in the real economy. After 1970 returns jumped to around 20% alongside much higher fluctuations and even reached 30% before the crisis.[9] Unfortunately, the misalignment between trading financial products and disbursement of loans servicing the real economy remained after the crisis, particularly in Europe. The volume of inter-bank loans is with 57,000 billion Euros over one and a half times the size of loans to the real economy (35,000 billion Euros).[10]

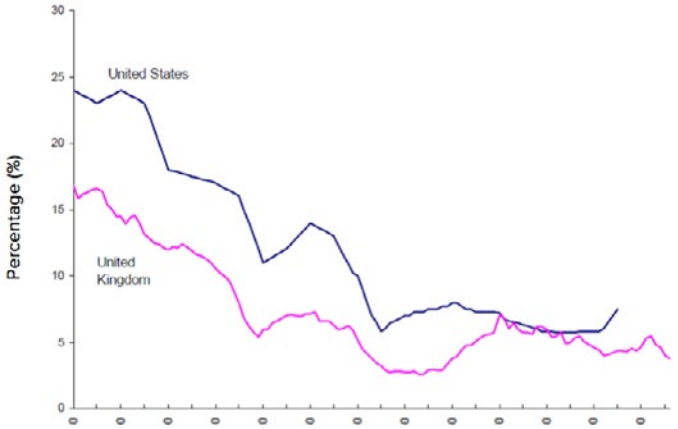
Figure 5: UK banking sector assets as % of GDP



Note: The definition of UK banking sector assets used in the series is broader after 1966, but using a narrower definition throughout gives the same growth profile.

Source: Alessandri and Haldane (2009) Speech Banking on the State, Bank of England, p. 24.

Figure 6: Capital ratios for UK and US banks



Note: The definition of UK banking sector assets used in the series is broader after 1966, but using a narrower definition throughout gives the same growth profile.

Source: Alessandri and Haldane (2009) Speech Banking on the State, Bank of England, p. 24.

7 Piergiorgio Alessandri & Andrew G Haldane (2009) "Banking on the State", Bank of England, available at: http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2009/speech409.pdf

8 Bank for International Settlement (2009) Issues in the Governance of Central Banks, May, p. 18.

9 Piergiorgio Alessandri & Andrew G Haldane (2009) "Banking on the State", Bank of England, p.3/4.

10 FinanceWatch (2014) "Strukturreform: Für einen Bankensektor im Dienste der Realwirtschaft", Policy Brief, August, p. 3.

3. The mechanisms of central banks in normal times

Central banks regulate the money supply and set interest rates in an effort to maintain a stable and growing economy, control inflation, and keep the financial system afloat.

For simplicity, the mechanisms described below refer to the current situation in which banks seek to expand economies post the recession. In theory, however, all tools could be reversed (i.e., decrease of money supply and increase of interest rates) to rein in an economy growing too rapidly with rising inflation.

One way to increase the money supply is to increase the its physical supply by printing money. Central banks can also increase the money supply in other ways as well. They can lower the minimum reserves commercial banks are required to hold which allows the banks to lend out more of the liquidity they have. Central banks can also use their foreign reserves. If they buy foreign currency, they disburse national currency in exchange, increasing their nation's money supply.

Open market operations, in which central banks buy government and corporate bonds and other financial products from commercial banks, can also increase the money supply in circulation which lowers interest rates. In recent years with interest rates basically at zero, these transactions have been extended by increasing the central banks' account balance and "creating" account money.[11]

Central banks regulate the interest rates at which commercial banks can borrow money from the central bank and at which they can deposit money there. Central banks influence the short-term interbank rate – the short-term interest rate at which commercial banks lend to each other and from which they get their main liquidity – indirectly through changing the money supply and their interest rates. The most commonly used interbank loan rate is the London Interbank Offered Rate (LIBOR) available in five currency denominations (Euro, US Dollar, British Pound, Japanese Yen, and Swiss Franc) and seven maturities (from overnight up to 12 month).[12] Besides the LIBOR there is the EURIBOR[13] which is based on European Banks' lending rates, the STIBOR (Stockholm Interbank Offered Rate)[14] for Sweden and the Federal Funds rate[15] in the US. In 2012-2014 it was discovered and proven that the big banks were fraudulently inflating or deflating their rates for the LIBOR to profit from transactions, which may have contributed to the slow recovery from the Great Recession, if not contributing to the financial implosion itself.

The repercussions in theory

Increase of loans and higher demand. When a central bank "eases" monetary policy and either expands the supply of money or lowers interest rates or does both, it normally lowers lending costs and increases the demand for loans. This in turn leads to higher investment of companies and consumption of households which increases production, creates employment and lifts wages and income.[16]

Depreciation of the national currency. A higher supply of money affects the exchange rate – the price of one currency expressed in another. When the money supply of, say, Euros expands, they become cheaper in Dollar-terms which is equal to a falling value of the Euro. Also lower interest rates generate money outflows in search for higher interest rates elsewhere. A lower value of the Euro helps export companies as their products get cheaper on the world market and makes import products more expensive which also helps domestic producers.[17]

Increases employment and inflation. Both these links, increased investment and consumption and a lower exchange rate, help the economy to expand, create employment and may spur inflation.

Rise in the stock market. An expansionary monetary policy that increases money supply and lowers interest rates can spur the stock markets where share prices normally move

11 Cezanne (1998) Grundzuege der Makrooekonomik, p. 81/82.

12 Global-rates (2016) LIBOR, information about the London InterBank Offered Rate, available at: http://www.global-rates.com/interest-rates/libor/libor.aspx

13 Global-rates (2016) Euribor - Information about Euribor, available at: http://www.euribor-rates.eu/

14 Swedish Riksbank (2015) Swedish market rates, available at: http://www.riksbank.se/en/Interest-and-exchange-rates/Explanation-of-the-series/Swedish-market-rates/.

15 Investopedia (2016) „What is the ‚Federal Funds Rate', available at: http://www.investopedia.com/terms/f/federalfundsrate.asp

16 Andrew Rose (2015) The IS-LM Model – Adding Financial Markets to the Real Side, Haas School of Business, University of California Berkeley, available at: http://faculty.haas.berkeley.edu/arose/macro9.pdf

17 John C. Driscoll (2003) Lecture Notes in Macroeconomics, Brown University and NBER, p. 31/32, available at: http://www.uh.edu/~bsorense/Macro_Lecture_Notes.pdf; p. 31/32

opposite to interest rates. When interest rates and savings do not pay much, banks and households invest in the stock market in hope for higher returns in the future. [18]

Decrease of government bonds. Interest rates and inflation expectations also affects government bond yields – the interest rates of government bonds. When interest rates are low, there is not much "competition" for investment and governments can issue their bonds with lower yields. Inflation "eats up" part of the yield which is why the expectation of increasing inflation increases the yield that investors will demand to buy government bonds. Government bond yields are often taken as an indicator for future prospects of the economy as they include the current situation as well as expected future developments. Government bonds are considered a safe but low paying investment. Demand for bonds can go up in times of crisis as they are considered a safe haven investment which lowers their yield. [19]

Assumptions for monetary policy to work

A key assumption is that the **velocity** with which money circulates in the economy remains constant, at least in the short run. If, however, velocity slows either in response to the policy or for some other reason, the link from monetary policy to the change in prices weakens. In reality velocity is dependent on various factors rather than a constant. This makes the **magnitude of the impact of monetary policy on output** a highly disputed point between the economic camps. Keynes was convinced that the effect of monetary policy would be close to zero in a recession as demand was the problematic side and opted for expansionary fiscal policy. The monetarist view shared among others by Milton Friedman argued that the opposite would hold. [20]

Strangely, given the importance of finance in modern economies, standard macro econometric models do not include a separate **financial sector** connecting money markets to the real economy or allowing for instability in finance to spill over and generate an economy-wide downturn. A balance sheet recession caused by exuberant debts in the financial sector that require deleveraging and increased loans to the real economy through expansionary monetary policy are conflicting and mutually exclusive. [21] Macro models also do not treat changing views of risk and the shift of assessment depending on how risk is perceived within the current economic and financial context.

The standard model assumes a **zero lower bound** for interest rates as depositors would withdraw their money and hold cash if banks charged instead of paying interest for deposits. This assumption implies that expansionary monetary policy with interest rates at zero do not have any expansive effect, which is called the liquidity trap. [22] Even though the current situation does not reflect the assumptions of the classical liquidity trap model in every aspect, it holds in the sense that with zero and negative interest rates there has been a growing disconnect between monetary policy and the real economy.

Another assumption is that monetary policy can only have a short term effect and will be **neutral in the long term**. This assumption is based on the theory of the neutrality of money. Given that the amount of money must equal the amount of real economic products, it is reasonable to assume that, say doubling the amount of money cannot double the real economy in the long run. Rather, it would in theory increase prices until the money supply equals again the amount of products.

4. Why was this crisis different?

The crisis that erupted in 2007 was different from a normal economic downturn, which affected the effectiveness of central bank policies. The Great Recession had its origin in exuberant bank lending that created excessive debts in the housing and financial markets. After the collapse of Lehman Brothers, the threat of a financial meltdown became real. Households and companies had piled up huge debts and had uncertain prospects of future incomes. Bank mismanagement gave them a shaky loan portfolio which made them fearful of their own solvency and suspicious of the solvency of other banks. This fear led to the collapse

18 Christos Ioannidis a and Alexandros Kontonikas (2006) Moentary Policy and the Stock Market: Some International evidence, Working Paper, University of Glasgow, September, available at: http://www.gla.ac.uk/media/media_219105_en.pdf

19 Investopedia (2016) Treasury Yield, available at: http://www.investopedia.com/terms/t/treasury-yield.asp; and Kimberly Amadeo (2015) "Treasury Yields – Why Treasury Yields Fall When Demand Rises", March 26, about money, available at: http://useconomy.about.com/od/economicindicators/p/Treasuries.htm.

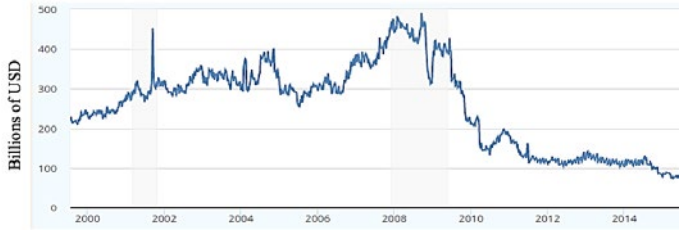
20 John C. Driscoll (2003) Lecture Notes in Macroeconomics, Brown University and NBER, p. 15/16 and 31; and Alan S. Blinder, "Keynesian Economics." The Concise Encyclopedia of Economics. 2008. Library of Economics and Liberty. 23 May 2016.

21 Otmar Issing (2014) Monetary policy and balance sheet adjustment, White Paper Series, No. 15, p. 2/3, available at: http://www.econstor.eu/bitstream/10419/98159/1/78826446X.pdf

22 Maria A. Arias and Yi Wen (2014) "The Liquidity Trap: An Alternative Explanation for Today's Low Inflation", Federal Reserve Bank of St. Louis, April, https://www.stlouisfed.org/publications/regional-economist/april-2014/the-liquidity-trap-an-alternative-explanation-for-todays-low-inflation

of interbank lending and borrowing. Between September 2008 and February 2009 the number of banks willing to lend in the US Fed funds market fell from almost 300 to 100. Large banks reduced their volume of borrowing. [23] In the US the volume of interbank lending which peaked in mid-October 2008 at USD 470 billion (see Figure 7) fell by over 85% to 64 billion at the beginning of April 2016, a level not seen since 1980. [24]

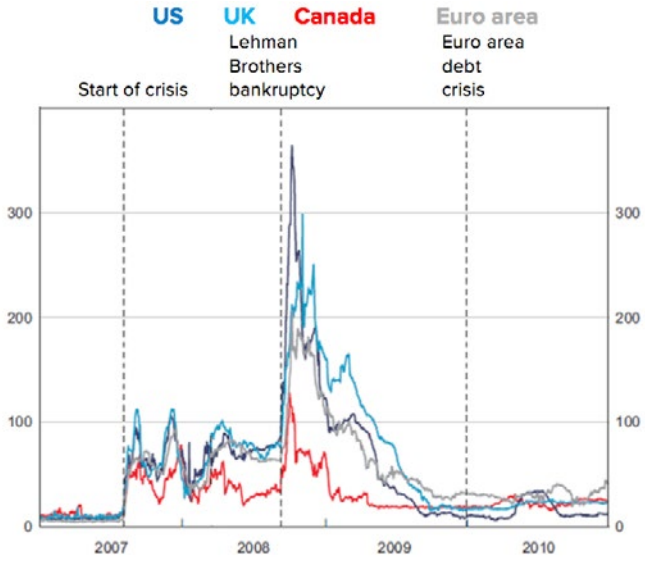
Figure 7: Interbank loans of all commercial banks



Source: Federal Reserve Bank of St. Louis (2016) Economic research, online data.

A further indication of the fear that prevailed in the financial sector is the spike that developed between the LIBOR and the Overnight Indexed Swap (OIS) rate, which measures the difference between the actual and the previously expected interest rates in interbank lending. Before 2007 the difference was as little as 0.01 percentage points in the US but it rose steeply to 3.65 percentage points after the crisis unfolded (see Figure 8).[25]

Figure 8: 3-month LIBOR-OIS spread in basis points



Notes: The LIBOR-OIS spread is the difference between the London Interbank Offered Rate and the Overnight Index Swap; it is a measure of stress in the money markets.

Source: Grahame Johnson and Eric Santor (2013) "Central Bank Liquidity Provision and Core Funding Markets", Reserve Bank of Australia, available at: http://www.rba.gov.au/publications/confs/2013/johnson-santor.html.

After the Great Depression in the early 1930s, the Fed had remained passive, which allowed bank credits to shrink by 40% between 1931 and 1933. In the first 9 month of 1930 alone around 700 banks shut their doors.[26] In order to avoid this mistake the Fed increased money supply immediately after the Great Recession. At the end of 2008 the US Fed cut interest rates to near zero and announced a program to buy assets of commercial banks which became known as quantitative easing[27].[28] Japan followed this approach in early 2013 and the ECB did so in mid-2015 (see Figures 9 and 10).[29]

23 Gara Afonso, Anna Kovner, Antoinette Schoar (2010) "Stressed not Frozen: The Fed Funds Market in the Financial Crisis", National Bureau of Economic Research, Working Paper 1506, p. 34ff, available at: http://www.nber.org/papers/w15806.pdf

24 Federal Reserve Bank of St. Louis (2016) Economic research, available at: https://research.stlouisfed.org/fred2/series/IBLACBW027NBOG

25 Daniel Kurt (2014) "What is the OIS LIBOR Spread And What is it For?", Investopedia, June 11.

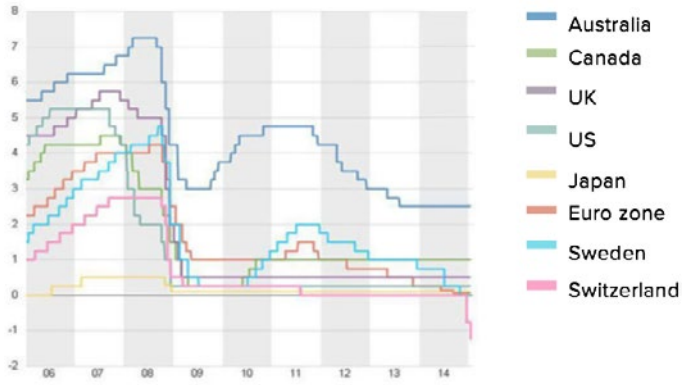
26 Liaquat Ahamed (2009) Lord of Finance: The Bankers Who Broke the World, London, p. 389 and 500.

27 Quantitative easing means that central banks buy government bonds, securities and other assets from commercial banks with money that did not exist beforehand. This changes the composition of assets at the commercial banks account balance (lowers their assets and increases their reserves at the central bank) and increases the balance sheet of the central bank as it increases the reserve the commercial bank holds and the assets the central bank holds.

28 Edmund Andrews and Jackie Calmes (2008) "Fed Cuts Key Rate to a Record Low", December 16, available at: http://www.nytimes.com/2008/12/17/business/economy/17fed.html?_r=0

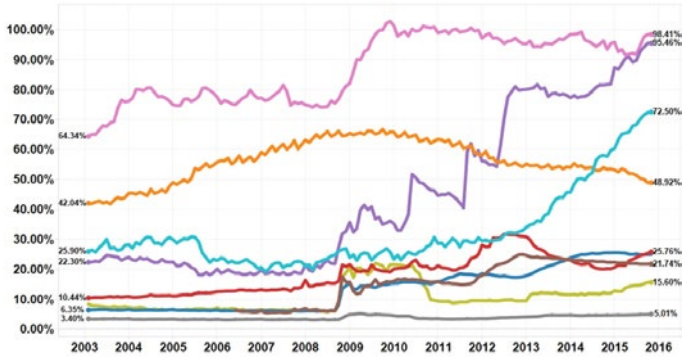
29 ITUC (2014) "Lowflation", low investment and higher debts than ever", Economic Briefing, June, p. 9/10.

Figure 9: Central bank interest rates (percent)



Source: Mike Corones (2015) "Why people pay banks to hold their money", Reuters, January 16.

Figure 10: Central Bank Balance Sheet/GDP Ratios



People's Bank of China, Federal Reserve, European Central Bank, Bank of Japan, Swiss National Bank, Bank of England, Bank of Canada, Central Bank of Taiwan, and Swedish Riksbank.

Source: National Inflation Association (2016) Charts on Central Bank Balance Sheets.

The hope was that banks would take up this additional money and extend their lending on lower interest rates toward business and households.[30] Fear and efforts to deleverage a desolate loan portfolio led banks to increase profit margins instead. The link between central banks interest rates and commercial bank interest rates weakened. As Figure 11 shows, the spread (i.e., the difference) between the interest rate banks paid for a loan and the interest rates they charged on to companies increased across countries. While recently this difference declined somewhat in the US and Germany, it still remained above pre-crisis level. The UK and France saw only a moderate increase. The disconnection was most dramatic in peripheral Europe.[31]

Figure 11: Spread between rates on loans to non-financial firms and the overnight interbank rate (basis points)

Source: Anamaria Illes and Marco Lobardi (2013) Interest rate pass-through since the financial crisis, BIS Quarterly Review, September, p. 59.

In the European Union, the disintegration of the financial market has led to high dispersion in lending rates for companies as well as households across Europe, high in the south and low in the center and the north, and across small and large loans. The highest variation was observed in Spain. The ECB's investigation on the channels that hamper the pass through of low interest rates finds that in the south, sovereign risks and macro- and borrower's risk are a big part of the explanation. Similarly the tightening of loan criteria is attributed to a higher risk perception and balance sheet constraints.[32]

Given the failure of central bank policy to spur low interest lending by banks, monetary policy did not lead to a rebound of consumption and investment (see Table 2). Moreover, with the exception of Japan, inflation also remains below pre-crisis levels (see Figure 12).

Table 2: Average annual growth rates in consumption and investment in main economies

	Averages		
	1998-2007	2008-17	Difference
Private consumer Expenditure			
Advanced Economies	**2.9**	**1.2**	**-1.7**
United States	3.7	1.7	-2
Euro Area	2.1	0.4	-1.7
Germany	0.9	1.0	0.1
France	2.7	0.8	-1.9
Italy	1.4	-0.4	-1.8
Spain	3.9	-0.4	-4.3
Japan	0.9	0.3	-0.6
United Kingdom	3.7	1.0	-2.7
Canada	3.5	2.1	-1.4
Gross Fixed Capital Formation			
Advanced Economies	**3.1**	**0.4**	**-2.7**
United States	3.7	1.0	-2.7
Euro Area	3.3	-0.8	-4.1
Germany	1.3	1.1	-0.2
France	3.9	-0.3	-4.2
Italy	3.0	-3.0	-6
Spain	6.9	-2.7	-9.6
Japan	-1.1	-0.5	0.6
United Kingdom	3.2	0.7	-2.5
Canada	5.1	0.6	-4.5

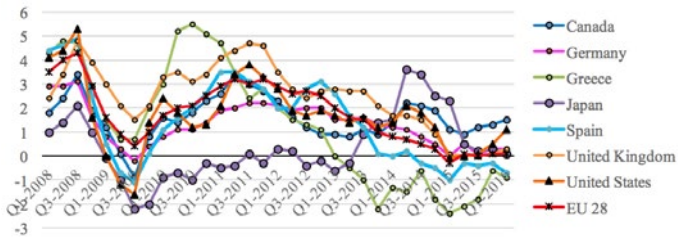
Source: IMF (2016) World Economic Outlook, April, p. 170.

30 The Economist (2015) "What is quantitative easing?", March 9, available at: http://www.economist.com/blogs/economist-explains/2015/03/economist-explains-5.

31 Anamaria Illes and Marco Lobardi (2013) Interest rate pass-through since the financial crisis, BIS Quarterly Review, September, p. 59, available at: http://www.bis.org/publ/qtrpdf/r_qt1309g.pdf.

32 European Central Bank (2013) Assessing the retail bank interest rate pass-through in the Euro Area at times of Financial Fragmentation, Monthly Bulletin, August, p. 81-89, available at: https://www.ecb.europa.eu/pub/pdf/other/art1_mb201308en_pp75-91en.pdf.

Figure 12: Inflation rate across selected economies (all items)

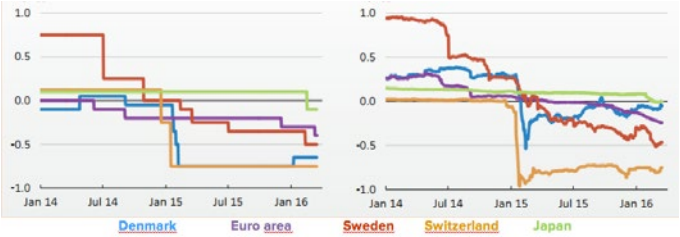


Source: OECD (2016) online database.

5. Negative interest rates – the last breath of monetary policy

Denmark was the first country to introduce negative interest rates in July 2012 followed by the ECB in mid-2014, Switzerland and Sweden at the beginning of 2015, Japan at the beginning of 2016 (see Figure 13 below) and finally Hungary in March 2016.[33]

Figure 13: Monetary policy interest rates (left) and 3-month money market interest rates (right) in percent

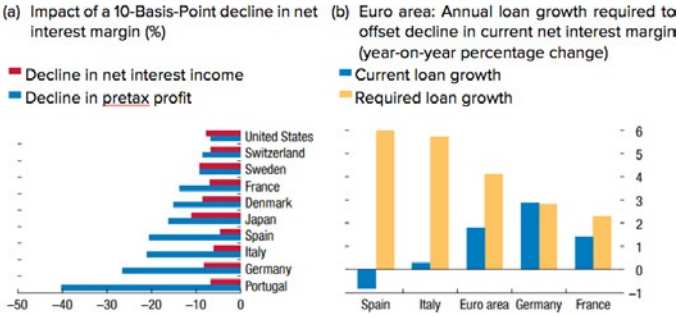


Source: Danish National Bank (2016) Current Economic and Monetary Trends, Monetary Review 1st Quarter 2016, p. 10.

About one quarter of the global economy is now under negative interest rate regimes. Particularly in Sweden, Denmark and Switzerland the driving motive for this policy was a surge of the exchange rate toward the Euro while the ECB and Japan introduced negative interest rates to battle the threat of deflation.[34] There is considerable speculation about the possible consequences of this new policy, which does not exist in standard economic theory.

Reduction of bank profits. An immediate consequence is that banks faced a lower profit margin: they pay interest on the money they hold in the central bank while being unable or unwilling to raise interest on the money they loaned to businesses or consumers, much less to charge depositors for keeping money in the bank.[35] Lower future profits were reflected in falling stock prices of major banks since the beginning of 2016.[36] Figure 14 below shows the effects of a simulated 0.1 percentage point reduction of the net interest margin on bank's profits (14a) and the required increase in lending volume to compensate for it (14b). The decline disproportionately affects European banks, where loan growth remains low. Some argue that this could lead to banks tightening lending criteria to assure safe returns and thus reduce lending rates.[37] It certainly puts pressure on banks to reduce costs and seek ways to pass negative interest rates on to their customers in the long-run.

Figure 14: Effects on bank's profits and required loan growth



Source: IMF (2016) Global Financial Stability Report, p. 46.

Pass through of negative interest rates. As noted, negative interest rates on deposits were generally not passed on to commercial banks' customers in fear they could withdraw money. There have been exceptions however. In Switzerland, wealth management Julius Bear Group Ltd., UBS and Credit Suisse charge on some accounts.[38] The Alternative Bank Schweiz even passed negative interest rates on to private customers charging 0.125% on deposits since the

33 A detailed description of the monetary policy and the results in Denmark, the Euro Area, Switzerland, Sweden and Japan is attached in the annex.

34 Claire Jones (2016) "Bank of International Settlements warns of negative rates risk" Financial Times, March 6, available at: http://www.ft.com/intl/cms/s/0/206f3528-e393-11e5-a09b-1f8b0d268c39.html#axzz47b5jcg8Y.

35 Alistair Gray (2016) "US banks endure biggest drop in revenues since 2011", New York, April 19, available at: http://www.ft.com/intl/cms/s/0/5d0b1df8-0634-11e6-9b51-0fb5e65703ce.html?siteedition=intl#axzz46HQC5H5Q

36 John Author (2016) "The constraints on cheap money", Financial Times Videos, April 7, available at: http://video.ft.com/4836441615001/The-constraints-on-cheap-money/markets.

37 Christopher Swann (2016) "The consequences of negative interest rates", CNBC, February 16, available at: http://www.cnbc.com/2016/02/16/the-consequences-of-negative-interest-rates-commentary.html

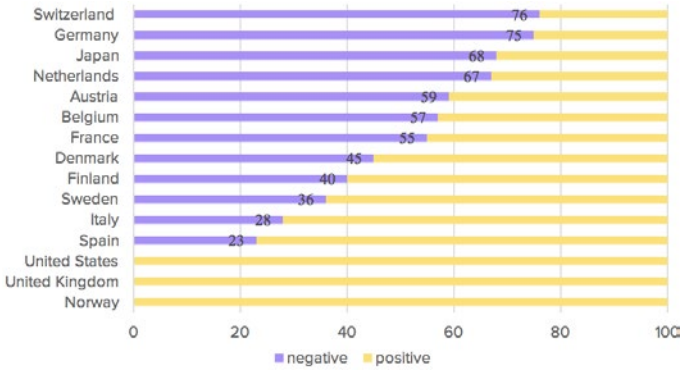
38 Giles Broom (2015) Julius Baer Charges Institutional Clients for SNB Negative Rate", Bloomberg, Febrary 26, available at: http://www.bloomberg.com/news/articles/2015-02-26/julius-baer-charges-institutional-clients-for-snb-negative-rate.

beginning of 2016.[39] In Germany Munich Re has reacted to negative interest rates by holding excessive amounts of cash . This comes at little cost as Munich Re holds big reserves of gold.[40]

In Denmark, Belgium and the Netherlands there have been cases of banks paying customers on their mortgage.[41] In Japan, sales of safes have doubled within a year as people have started to hoard cash.[42] It is hard to evaluate how widespread such phenomena have become. Certainly, the more banks do the first step the more will follow. A situation combining increased cash withdrawal of depositors and increased demand of mortgages with negative interest rates does not sound like a sustainable business model and might undermine "the foundations of the financial system as we know it today" warns the Bank for International Settlements.[43] If private entities start to hold their savings in cash, the whole cycle of savings being used to re-invest will break.

Shift in risk premium. There is strong preference for safe rather than high returns. Demand for gold, which is often a safe haven investment in uncertain times, rose by 21 %, and the price by 17% in the first quarter of 2016.[44] Real estate is also normally considered a safe investment in a low inflation situation. Particularly in Canada, Sweden and Denmark where household debt levels were relatively low after the crisis and disposable income is stable, negative interest rates spurred the real estate market.[45] Housing prices rose by 40% in Sweden and 50% in Denmark since the crisis and the IMF has cautioned against the potential build-up of housing bubbles that could burst in a downturn as happened in Spain.[46] Also demand for safe investments such as triple-A corporate bonds and government bonds has increased[47] and pushed yields downwards. As Figure 15 shows, more than two thirds of outstanding government bonds in Switzerland, Germany, Japan, and the Netherlands have negative yield rates.

Figure 15: Share of government bonds with negative yields



Source: IMF (2016) Global Financial Stability Report, p. 11.

Bloomberg estimates that the total volume of sovereign bonds issued with negative yield rates amounts to USD 7 trillion and those denominated with rates between zero and 1 percent to USD 9 trillion. Low interest rates and quantitative easing have chilled the market of sovereign bonds. The negative yields make newly issued bonds unattractive for investors while those who hold positive yielding bonds are reluctant to trade. This causes higher fluctuations in prices as the liquidity in the market and the number of actors declines.[48] While safe investment becomes "more expensive" in the form of record low returns, more uncertain investments become more attractive too which might lead to higher risk taking in the absence of any safe alternative. This has already materialised in a convergence of sovereign yield spreads across Europe and a return to misclassification of risks as was the case before the crisis.[49] Another concern is that it could lead to risk-misclassification of shady financial products. Central banks themselves have extended their classification of safe assets as was recently done by the ECB.[50]

Higher volatility. The divide among investors of those clinging on to safe (and positive) investments and those searching for the highest return possible on a short-term

39 John Letzing (2016) "Negative Rates: How One Swiss Bank Learned to Live in a Subzero World", The Wall Street Journal, April 14, available at: http://www.wsj.com/articles/negative-rates-how-one-swiss-bank-learned-to-live-in-a-subzero-world-1460547973

40 Insurance Journal (2016) "Update: Munich Re Counters Negative Interest Rates by Boosting Cash Reserves", March 17, available at: http://www.insurancejournal.com/news/international/2016/03/17/402212.htm

41 Tyler Durden (2016) "Denmark, Belgium, Now the Netherlands: Negative Mortgage Rates Spread Across Europe", zerohedge, April 16, available at: http://www.zerohedge.com/news/2016-04-16/first-denmark-then-belgium-now-netherlands-negative-mortgage-rates-spread-across-eur

42 Lucinda Shen (2016) "Japan's Negative Interest Rates Are Drving up Sales of Safes", Fortune, February 23, available at: http://fortune.com/2016/02/23/japans-negative-interest-rate-driving-up-safe-sales/ .

43 Hervé Hannoun (2015) Ultra-low or negative interest rates: what they mean for financial stability and growth, April 22, Bank for International Settlement, p. 8, available at: http://www.bis.org/speeches/sp150424.pdf.

44 Henry Sanderson (2016) "Gold demand breaks first-quarter record", Financial Times, May 12, available at: http://www.ft.com/intl/cms/s/0/f6c50370-1820-11e6-b197-a4af20d5575e.html#axzz48qbFkVbR

45 IMF (2016) Global Housing Watch, April, available at: http://www.imf.org/external/research/housing/.

46 Karin Hammer (2015) "Sweden's Economy is Robust, but Faces Challenges in Housing , Labor Markets, IMF Survey, December 2, available at: http://www.imf.org/external/pubs/ft/survey/so/2015/CAR120215A.htm; Peter Levring (2016) "IMF Urges Action as Negative Rates Infect Danish Property Market", Bloomberg, May 8, available at: http://www.bloomberg.com/news/articles/2016-05-08/imf-urges-action-as-negative-rates-infect-danish-property-market.

47 Gillian Tett (2016) "What pawnbrokers can teach central banks", Financial Times, April 28, available at: http://www.ft.com/intl/cms/s/0/d632269e-0c57-11e6-9456-444ab5211a2f.html#axzz479IlvkvO

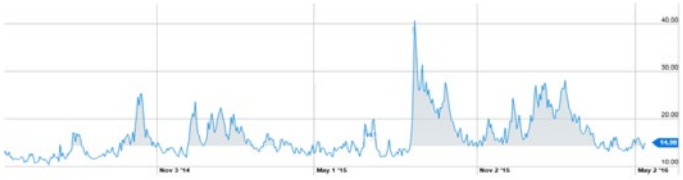
48 http://www.bloomberg.com/news/articles/2016-03-03/negative-rates-qe-less-liquidity-in-government-bond-markets

49 http://www.bis.org/speeches/sp150424.pdf p. 2/3

50 http://www.ft.com/intl/cms/s/0/bd131810-056f-11e6-9b51-0fb5e65703ce.html?siteedition=intl#axzz46HQC5H5Q

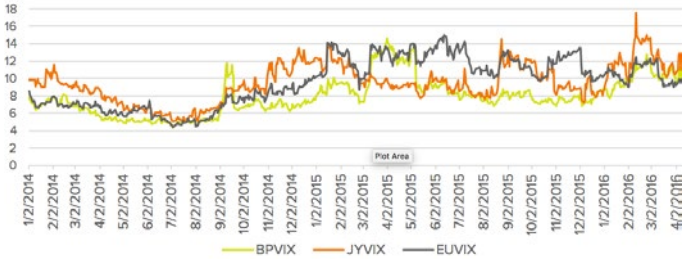
basis might add to an increase in volatility in high-risk market segments and destabilize the financial system. Indeed, stock markets, which have been on the rise since the crisis, have become more volatile in the last 18 months (see Figure 16) reflecting the nervousness of investors. Similar to stock markets, the volatility of exchange rates has surged again since the beginning of 2015. The level of volatility is certainly not at crisis level but shows alleviated investor's distress (Figure 17). An environment in which long-term returns become increasingly uncertain and financial market volatility increases provides no basis for fixed investment in the real economy. Negative interest rates in this context might be perceived as a sign of a gloomy future in which deflation is within the range of possibilities.

Figure 16: Volatility Index (VIX) of the S&P 500



Source: Yahoo Finance (2016) online data.

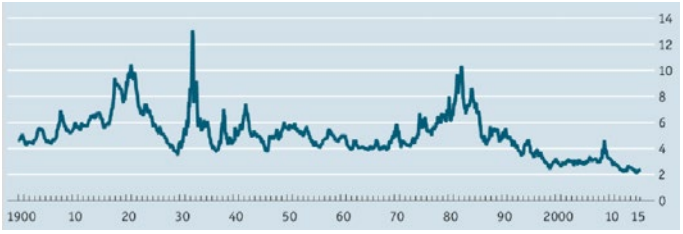
Figure 17: Currency volatility indices of the British Pound, the Yen and the Euro



Source: CBOE (2016) online database.

Negative interest rates and inequality of wealth. The effects of negative interest rates on the distribution of income are unclear. Some argue that negative interest rates are a "destruction" of capital that will hit capital owners and therefore reduce inequality. The opposite is however more likely. Top income earners have gained substantially from the surging stock market. And while the Bank for International Settlement considers increased investment in the housing market an off-setting factor,[51] this might depend on how much real estate investment is speculative compared to turning renters into home owners. On the other hand there is the middle class with people who are more risk adverse and dependent on life-time savings and pension fund returns. Projections based on an average US investment portfolio show that returns on financial assets have never been at such a low level (see Figure 18).

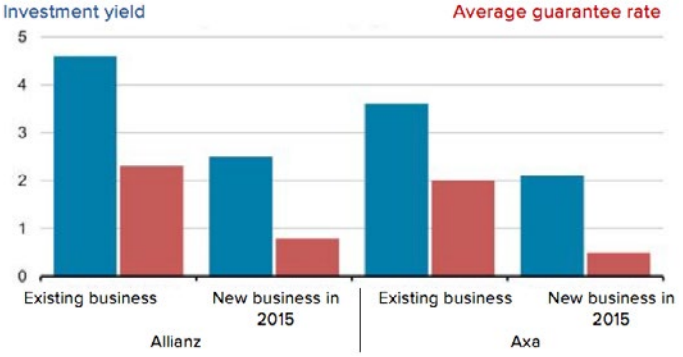
Figure 18: Projected real returns (%) on a typical American portfolio



Source: The Economist (2015) "Many unhappy returns", November 21.

Pension funds threaten to cut benefits in Germany, France and the Netherlands due to negative interest rates and low bond yields.[52] Much of this outcry might be tactics to sustain profit levels at the cost of pensioners, and Mario Draghi defended his policy arguing that US pension funds are coping much better with an even longer period of zero interest rates.[53] Insurance companies also depend on long-term returns. Insurers have lowered their guarantee for newly signed life insurances and saving plans and will be able to cover the gap for years to come as they hold older and higher yielding bonds (see Figure 19).

Figure 19: Investment yields and promised returns in life and savings businesses (%)



Source: Paul Davies (2016) "Negative Rates and Insurers: Be Afraid" March 3, The Wall Street Journal.

While the liquidity of insurance companies and pension funds does not seem to be immediately threatened, lower returns can affect the accumulation of life-time savings far in the future. Assuming the persistence of low returns, trouble only arises when insurance companies need to reinvest in

51 Dietrich Domanski, Michela Scatigna and Anna Zabai (2016) "Wealth inequality and monetary policy", BIS Quarterly Review, March, available at: http://www.bis.org/publ/qtrpdf/r_qt1603f.pdf

52 Madison Marriage and Chris Flood (2016) "Negative interest rates 'poison' German pension funds", May 15, Financial Times, available at: http://www.ft.com/intl/cms/s/0/3ceb364c-191d-11e6-b197-a4af20d5575e.html#axzz48qbFkVbR

53 Mario Draghi, (2016) "Introductory statement to the press conference", April 21, available at: https://www.ecb.europa.eu/press/pressconf/2016/html/is160421.en.html

what may be super low yielding bonds. It is also unclear how low returns will affect consumer behaviour and the demand of life insurances and saving plans as many might turn to other investments or prefer holding cash. [54]

6. There are alternatives

As the Appendix shows in more detail, for several central banks quantitative easing and negative interest rates have not resulted in higher investment and increased inflation. Effects are limited to the devaluation of exchange rates which was partly offset by expansionary monetary policy of other central banks and safe-haven investment inflows (like in Switzerland and Denmark). Another effect resulting from monetary expansion was the surge in the stock market (see Appendix on Sweden). On the downside and as elaborated in the previous chapter, these policies have added to uncertainty, higher volatility and destabilized the financial system which impeded rather than encouraged long-term investment.

The current crisis respose relies on the neoclassical assumption that everything can be regulated through interest rates. It is based on an economic model that does not even include a financial sector as independent and rent seeking actor in between the money market and the real economy – a model that is fundamentally flawed.[55] An economic approach that emphasizes low interest rates and low wages as providing cheap means of production is based on the classical assumption that production generates an equal amount of demand, a concept created by Jean Baptist Say, a French economist.[56] Accordingly, the wage and capital used in production will re-emerge as demand within the economy.

While there is far-reaching agreement that lack of demand is a major component of the weak and unsteady recovery,[57] there is less consensus or perhaps willingness to accept the reality that monetary policy has failed and that there are needs for alternative and complementary policies, and that unless the broken link between financial markets and real spending can be fixed, the world economy faces the danger of having no tools to create the recovery that it needs. There is also common agreement that negative interest rates cannot be part of a sustainable financial system in the long run.

Alternative 1: helicopter money. The term "helicopter money" coined by Milton Friedman in 1948 has gained prominence in recent months. It is the idea that central banks can overcome a lack of demand by simply printing money and dropping it from a conceptual helicopter on governments or people to spend.[58] What has been a taboo in central bank thinking – financing direct government spending – has thus returned to policy discourse,. It raises the question as to whether the independence of central banks is indeed necessary and helpful in all circumstances. In a recent press conference, Mario Draghi called the concept "very interesting" which "may mean many different things".[59] If it would take the form of public investment as proposed by the OECD reversing the failed austerity policy, it would help lift growth prospects. The critical question will be who it will be thrown at and what they will do with it. So far helicopters have been circling over bankers and big companies who either pocket the money or invest in stocks or the real estate market – none of which creates demand. If workers and the middle class would catch it, this could create a different dynamic.

Alternative 2: wage growth and reduced unemployment. A closely linked alternative would involve strengthening collective bargaining and encourage wage growth and push companies to pass on profits to workers and help stabilise prices at the same time. In recent years business has neither used cheap money to invest and create new employment nor passed on profits to workers in the form of wages. Investment and consumption across the developed world and most of developing countries have remained considerable below pre-crisis level (see Table 2). Particularly the shrinking capital stock has led to a slow-down of productivity that threatens future growth (Table 3).[60]

54 Paul Davies (2016) "Negative Rates and Insurers: Be Afraid" March 3, Wall Street Journal.
55 Joseph Stilgitz (2016) „The problem with negative interest rates", April 18, the Guardian.
56 Say, Jean-Baptiste, A Treatise on Political Economy. C. R. Prinsep, trans. and Clement C. Biddle., ed. 1855 . Library of Economics and Liberty. 23 May 2016.
57 OECD (2016) Interim Economic Outlook, February; and Mario Draghi (2016) "Addressing the causes of low interest rates" Speech given at the Annual Meeting of the Asian Development Bank "The future of financial markets: A changing view of Asia" on May 2, available at: https://www.ecb.europa.eu/press/key/date/2016/html/sp160502.en.html
58 Financial Times (2016) "The hurdles to 'helicopter money' are shrinking, May 11.
59 Mario Draghi (2016) Transcript of the Press Conference on March 10, available at: https://www.ecb.europa.eu/press/pressconf/2016/html/is160310.en.html
60 United Nations (2016) World Economic Situation and Prospects 2016, New York, p. 21, available at: http://www.un.org/en/development/desa/policy/wesp/wesp_current/2016wesp_ch1_en.pdf.

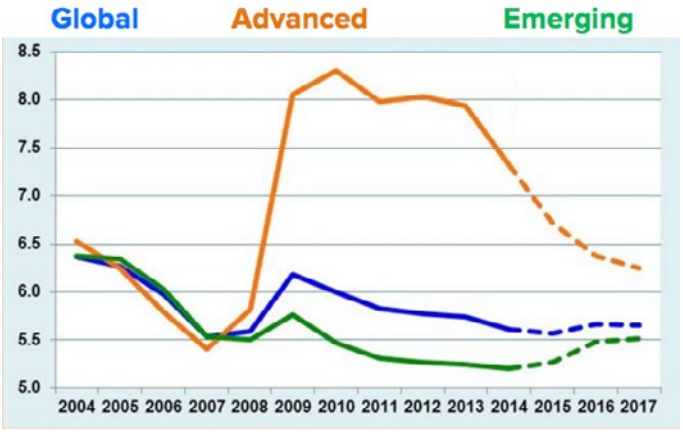
Table 3: Growth of labour productivity, before and after the crisis

	Average percentage change per year	
	2001-2007	2009-2014
France	1.5	0.9
Germany	1.3	1.2
Japan	1.6	1.2
United Kingdom	2.2	0.3
United States	2.0	0.9
China	9.5	7.4
India	4.4	7.0
Russian Federation	5.4	2.0
South Africa	3.1	1.5

Source: United Nations (2016) World Economic Situation and Prospects 2016, New York, p. 21.

Unemployment has declined in the US and to a lesser extent in Europe. In the US unemployment remains relatively low at 5.0%, or less, but the persistently low employment-to-population ratio (population age 16 and over) of below 60% means that the country has permanently lost 3-4% of its once world-leading employment rate.[61] In the Euro area, the unemployment remains high at 10.2% (April 2016) though it has declined by 1.0 percentage point over the previous year. There are substantial regional differences ranging from 24.4% in Greece to 4.1% and 4.2% in the Czech Republic and Germany respectively.[62] The Euro-area-wide employment-to-population rate (age 16 to 64) remains 1.1 percentage point below its level in 2008 and stands currently at 69.3% (Q4-2015).[63] In emerging markets unemployment is on the rise and is expected to continue. The situation is particularly severe for oil exporting economies (see Figure 20).[64]

Figure 20: Global unemployment in percent

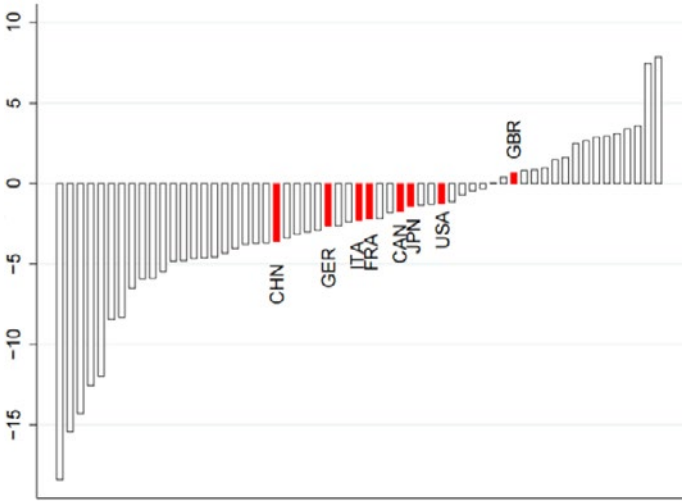


Source: Prakash Loungani and Zidong An (2016) "Unemployment: Troubles Ahead for Emerging Markets", IMFdirect, May 3.

The alleviation in labour markets has not resulted in wage growth. In OECD countries real wage growth between 2008 and 2014 was a mere 0.5 % compared to 1.8 % between 2000 and 2007.[65] This will not reverse the overall and decade long trend of falling labour shares. Out of 59 countries with data availability between 1975 and 2012, the labour share was falling in 42 (in 37 significantly) compared to 9 economies where it increased significantly (see Figure 21).[66]

61 Bureau of Labor Statistics (2016) Employment Situation Summary, May 6, available at: http://www.bls.gov/news.release/empsit.nr0.htm
62 Eurostat (2016) "Arbeitslosenquote im Euroraum auf 10,2% gesunken", Pressemitteilung euroindikatoren, March.
63 European Commission (2016) Eurostat database.
64 Prakash Loungani and Zidong An (2016) "Unemployment: Troubles Ahead for Emerging Markets", IMFdirect, May 3.
65 United Nations (2016) World Economic Situation and Prospects 2016, p. 3, available at: http://www.un.org/en/development/desa/policy/wesp/wesp_current/2016wesp_ch1_en.pdf
66 Loukas Karabarbounis and Brent Neiman (2013) "The Global Decline of the Labor Share", NBER Working Paper, p. 1, available at: http://www.nber.org/papers/w19136.pdf

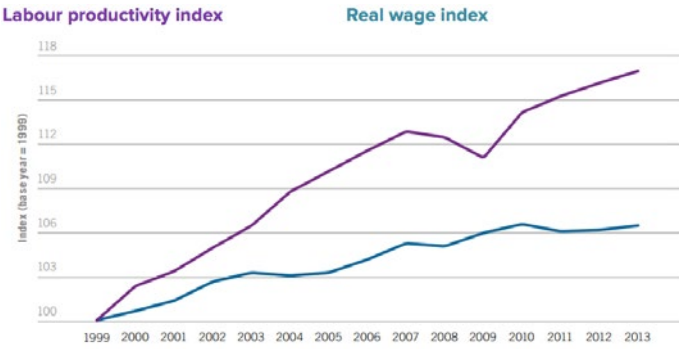
Figure 21: Estimated labour share change over 10 years in percentage points



Source: Loukas Karabarbounis and Brent Neiman (2013) The Global Decline of the Labor Share, NBER Working Paper, p. 37.

Redistributive measures targeted at regular citizens and workers can enhance consumption, investment, prospects and future growth.[67] Substantial wage increase would help reduce the wage-productivity gap (Figure 22).

Figure 22: Trends in growth in average wages and labour productivity in developed economies (index), 1999-2013



Source: ILO (2015) Global Wage Report 2014 / 15 Wages and income inequality, p. 8.

Alternative 3: tightening lending regulations and strengthening of public credit institutions. Despite the fact that re-regulation has been disappointing and inadequate, particularly in the EU, there is nothing that would impede regulators to finish this job and set some thresholds for lending quotas (i.e., SMEs versus medium/large companies; mortgage/consumption versus investment; financial sector versus real economy). Further, a strengthening of government, owned or sponsored financial institutions could be another way around the reluctance of banks to lend. The Junker plan strengthened the role of the EIB. Critics lament that the scale is not big enough, but the first analyses revealed another problem: it is not the money for investment that is lacking but sound investment plans[68] partly due to the fact that the projects eligible for EIB co-financing are very narrow. This turns the story back to the lack of demand, wage growth and helicopter money for those that need it.

Returning to Roosevelt and the failure of monetary policy, it is certainly time “to admit it frankly and to try another”.

67 IMF (2015) Causes and Consequences of Income Inequality: A Global Perspective, Staff Discussion Note, June.

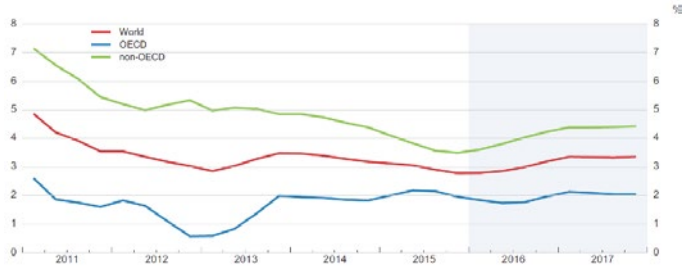
68 Deutsche Welle (2016) “Was wurde aus dem Juncker-Plan?”, January, available at: http://www.dw.com/de/was-wurde-aus-dem-juncker-plan/a-18980794

Chapter 02:
OECD looks to higher public investment and higher wages to support the recovery

The latest economic forecasts from the OECD[69] do not paint a bright picture . While advanced economies would continue to grow, the OECD is expecting the pace of growth to remain disappointingly weak. After struggling to reach only 2% on average per year, OECD growth will now fall back to below 2% in 2016 and barely recover to 2.2% in 2017. While the Euro Area and even more so Japan are the (usual) laggards (with respectively 1.5% and 0.6% growth for 2016), growth in the US (1.8%) is not so brilliant either. In other words, eight years after the crisis, the growth engine is far from being ignited and the economy continues to perform below its potential.

69 http://www.oecd.org/eco/economicoutlook.htm

Figure 23: Global GDP growth is set to remain subdued. Year-on-year percentage changes



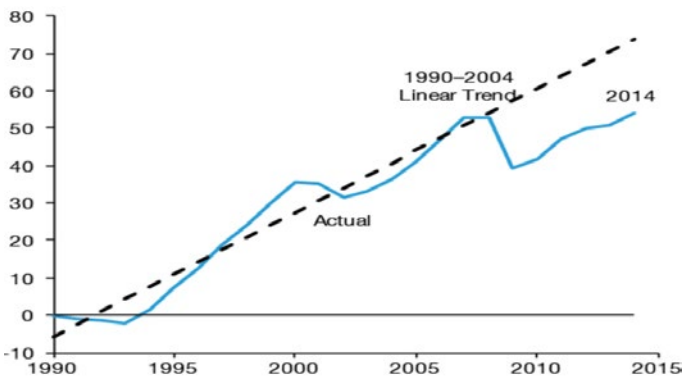
Source: OECD Economic Outlook 99 database.

In analysing the causes and the remedies for dismal growth performance, the OECD's Economic Outlook delivers a series of messages that are important.

1. Key policy channels have broken down

First, the OECD signals that the link between low (in some cases even zero) interest rates and investment has broken down. It offers a 'Keynesian' /demand side view for this by saying that "if companies continue to doubt that national and global demand will strengthen (...), business investment growth will be weaker than projected". The graph below shows the extent to which the trend in business fixed investment dynamism has gone down. Despite monetary policy providing almost zero cost credit, despite all sorts of structural reforms having the overall effect of 'pampering' the interests of business, investment is much weaker than before and the root cause of it is a lack of aggregate demand.

Figure 24: Business fixed investment across advanced economies, 1990-2014

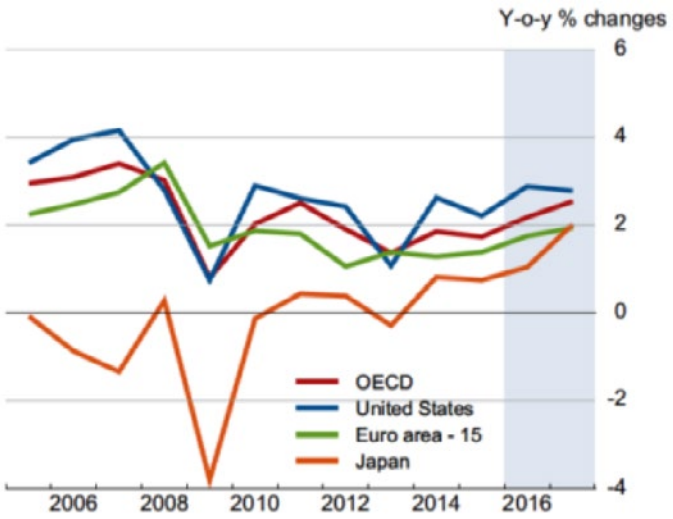


Even more significant is the OECD's explicit reference to the role of muted wage gains in keeping the upturn modest. Indeed, as can be seen from the graph below, while nominal wage growth has come down since the crisis, it has failed to recover since then.

What can also be noticed from this graph is that the OECD's forecast is actually based on the assumption that wages will strengthen in 2017, thereby giving more support to recovery. As the OECD argues in its text, "if the links (between lower unemployment and wage growth) were to be even weaker than assumed, the pick-up in growth would be slower".

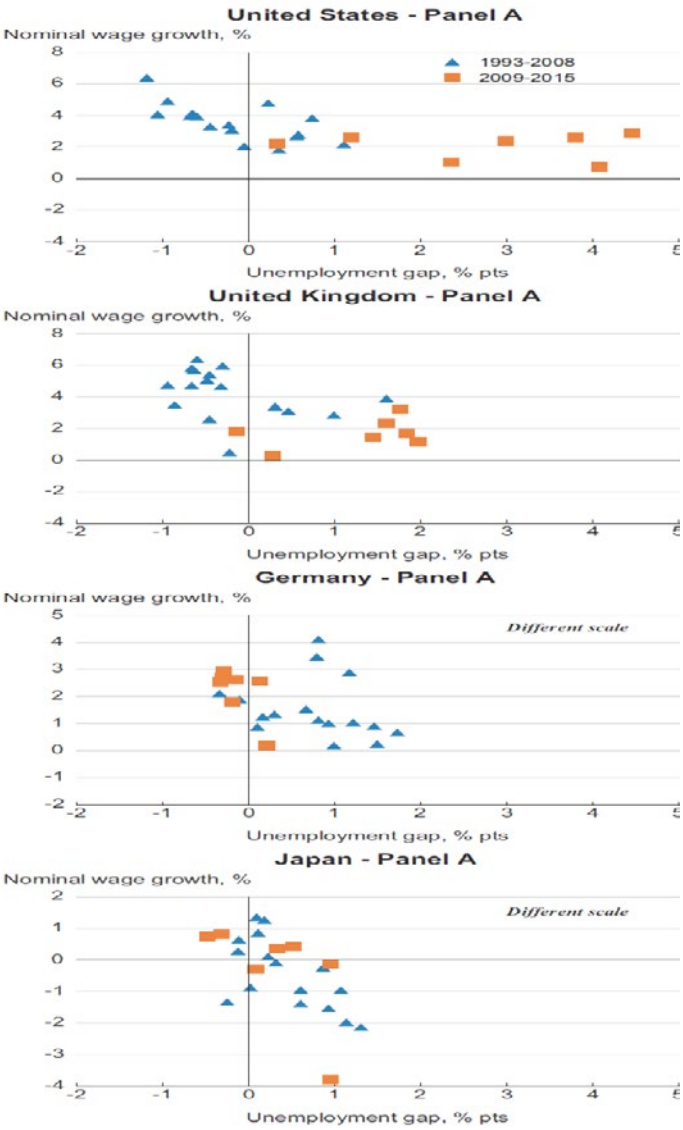
Implicitly the OECD is now acknowledging that wages are not to be seen as a cost factor but as an engine for demand and recovery.

Figure 25: Compensation per employee



At the same time, the OECD is also suggesting that hopes should not be too high on the possibility of a strong wage recovery. The following graphs show that wages are the second key transmission mechanism that has broken down. Whereas lower or falling unemployment in the past led to a strengthening of wage growth, this is no longer the case. While wages in the US and UK would have increased by 4 to 6% in the past at the same measure of unemployment, they are now barely moving around a growth rate of 2%.

Figure 26: Relationship between wage growth and unemployment has changed



Note: Nominal wages are mesured as compensation per employee. Real wages are nominal wages deflated using the consumers' expenditure deflator. The unemployement gap is the difference betweenthe unemployement rate and the estimated sustainable rate.

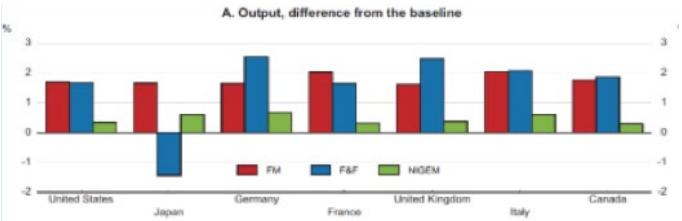
Source: OECD Economic Outlook 99 database.

2. The 'low growth trap' and how to escape from it

The OECD continues to surprise by warning that the weak recovery has led to a 'low growth trap', a trap which has nothing to do with globalisation or technological or demographic changes but with years of dismal growth performance resulting in a self-fulfilling prophecy. Investment is weak because business is expecting low demand and demand is low because business is not investing. At the same time, the lack of investment is eroding the capital stock and preventing new innovations from spreading throughout the economy. So when policy makers (including the OECD itself) are concerned about productivity slowing down, a major part of this slowdown can actually be explained by the failure of macroeconomic demand management in ensuring complete recovery from the financial crisis. If however (and note that this is again the language of the OECD) a different growth path is taken, with faster wage growth together with greater equity, then higher demand will lead to higher investment, higher productivity and more innovation as businesses invest in new products, new processes and new workplaces.

To shift our economies to such a path, the OECD insists on the role of active fiscal policy. Monetary policy, already overburdened, should remain supportive of the economy but can't do much more. Fiscal policy should now be deployed more extensively and, by locking in very long interest rates at long maturities, also has the fiscal space to do so. This call for a fiscal stimulus is backed up by simulations showing high multipliers for public investment expenditure. If public investment is increased by 0.5% of GDP, economic activity goes up by around 0.4%, even 0.6% in case the public investment push would be coordinated amongst the OECD economies. The next graph describes the results from three different models, with all three of these showing positive results for the economy (except in one model for Japan). There is also the improved sustainability of public finances that according to the OECD will result from the stimulus: The increase in economic activity will lower the ratio of public debt to nominal GDP by increasing the latter (the denominator effect).

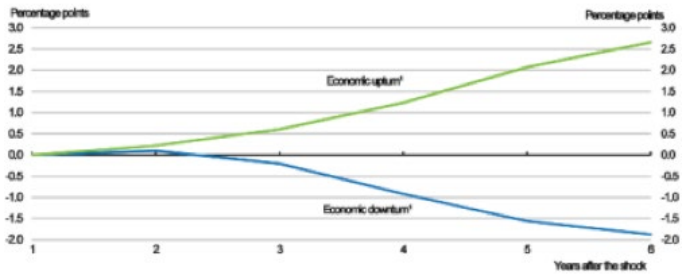
Figure 27: Long-term effect of a sustained increase in public investment by 0,5% of GDP



Structural reforms: Stop digging an even deeper hole

While the proposal for a public investment stimulus is linked with the usual language of structural reforms, the OECD's outlook at the same time suggests taking a more nuanced approach. This reflects research published in an earlier OECD publication finding that several structural reforms, when undertaken in a period of crisis and certainly when monetary policy is already near the zero bound on nominal interest rates, will deepen and prolong the crisis by further depressing demand (see here https://www.hse.ru/data/2016/03/06/1125706157/1216011e.pdf). This is particular so in case of reforms that put downwards pressure on wages. It is also the case for reforms that cut unemployment benefits as such reforms will squeeze aggregate demand (unemployed lose benefits without gaining jobs as they are not available), thereby leading to a loss in employment and this even six years after the reform (see Figure 28).

Figure 28: The gains in employment of an unemployment benefit reform can turn negative during a downturn



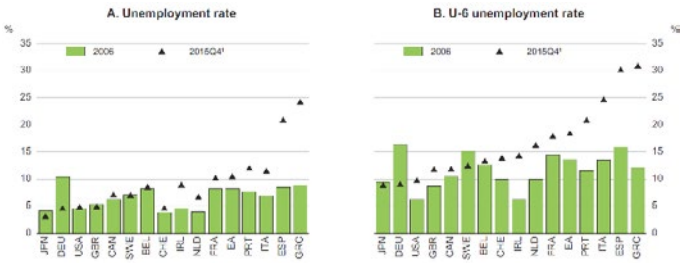
3. Why this change?

One reason is that, after a series of erroneous forecasts predicting a much stronger recovery that each time failed to realise, the OECD has 'sobered up' and is now taking an in depth look at the economy and the factors that are driving it or are holding it back, instead of simply relying on relationships and policy channels of the past upon which existing econometric models are based.

The other part of the explanation however is that there is every reason to be worried about the present situation as economies find themselves in a precarious equilibrium.

First, eight years after the financial crisis, labour markets still have a lot of 'healing' to do. While unemployment rates are gradually declining in most OECD economies, several of them are still at levels that are substantially higher compared to their pre-crisis level. The average Euro-area unemployment rate in particular is driven up by French and Italian unemployment rates (still higher than 10%) and by Spanish and Greek rates that are substantially higher than 10% (see Figure , left hand panel).

Figure 29: Broad measure of labour market slack remain elevated



Note: U-6 is a measure of labour underutilisation calculated as the sum of total unemployed, all persons marginally attached to the labour force and total involuntary employed part time for ecnomic reasons, as a per cent of the civilian labour force plus all persons marginally attached to the labour force. The age group is 15 years old and above.
Source: Eurostat; Ministry of International Affairs and Communication of Japan; United States Bureau of Labor Statistics; OECD Labour Force Statistic; OECD Main Economic Indicators; and OECD calculations.

Even economies where the unemployment rate has come down to its pre-crisis level (or is even below that like in Germany) continue to suffer, if one takes a closer look. The right hand side panel of the graph above shows that the situation is even more worrying if a broad measure of labour underutilisation is taken (including persons marginally attached to the labour force and involuntary part time). The Euro area once again stands out with a rate of labour underutilisation at almost 20% and as high as 30% in Spain and 25% in Italy. The rest of the OECD however is not doing so well on this measure either. Whereas unemployment rates in the US, UK, Japan, Germany are as low as 5% or less, their labour underutilisation rates are twice as high at 10% or higher. In other words, all labour markets in all OECD economies stand to gain if growth would strengthen from this dismal pace of less than 2%.

A third element of this precarious equilibrium the world economy finds itself in is the failure of central banks to keep inflation from falling to a pace that is too low and too close to zero to be comfortable. This, it should be stressed, is not just about the Euro area (which is now in its fourth straight month experiencing negative price growth) joining Japan in its decade of deflation. Nor is it just about headline inflation

falling to zero because of lower oil prices as core inflation rates have also come down. It is also and importantly about inflationary expectations getting unanchored and drifting downwards and away from central banks' inflation objectives (see Figure 30).

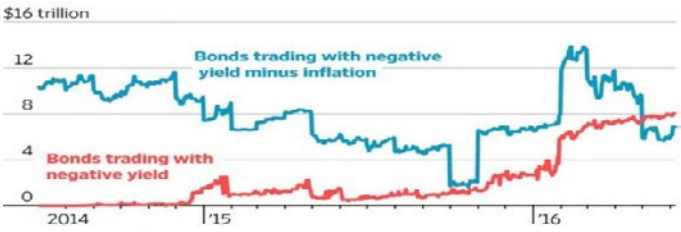
Figure 30: Inflation breakevens have reached new lows in Europe and the US

Source: Morgan Stanley Research, Bloomberg

This is important because inflationary expectations play a key role in ensuring a situation of price stability that is conducive to investment and economic activity. The key issue here is that inflationary expectations act as a self-fulfilling prophecy. If economic agents expect future inflation to be zero, they will base pricing policy and wage demands on this expectation and inflation then indeed turns out to be zero. However, if inflation goes to zero and if nominal interest rates do not go down in a corresponding way (because of the zero bound on nominal interest rates, households and corporates hoarding paper money if banks star charging money on deposits), then real interest rates go up. The economy finds itself in the deflationary spiral where depressed demand leads to falling prices, where falling prices lead to higher real interest rates so that investment and other durable purchases are postponed and demand is further depressed.

This kind of process is actually already ongoing, as can be seen from the graph below. Whereas central banks around the world are doing everything to push nominal interest rates down (even to the extent that long term interest rates dive somewhat below zero), inflation rates have tended to go down faster. So if the volume of sovereign bonds trading at below zero NOMINAL interest rates continues to go up and is reaching 8 trillion, the volume of bonds across the world trading at negative REAL interest rates is actually going down. The latter is exactly the opposite the economy needs if one wants growth to be stronger.

Figure 31: Wrong Direction: More governement bonds are trading at negative rates. But substract inflation and 'real rates' are in many cases higher, reflecting central banks' struggles to lift price trends



Source: JP Morgan Chase

Zero and even negative headline inflation, core inflation rates below 1%, expectations for inflation even ten years from now that are falling, real interest rates showing upwards trends despite the fact that policy rates are pushed down below zero, all of this is testifying to the fact that central banks are losing their grip on key economic processes.

Finally, there is the concern that things could spiral out of control very quickly. If central banks around the world have defined price stability as a low but still positive rate of inflation (2 to 3% in most cases), this is because they want to build in a safety margin against unexpected negative shocks. If inflation is at 2.5% and a serious negative demand shock develops that pushes inflation down to, say, 1.5%, then the distance from the zero nominal interest rate bound would probably still be sufficient enough for monetary policy to come to the rescue and revive demand by pushing nominal interest rates down.

Many of the OECD economies however are at this moment far from being in a situation of having such a buffer against demand shocks. Both inflation as well as policy interest rates are already at zero or close to zero. If their economies are hit by a negative shock, traditional monetary policy ammunition is out of ammunition as nominal interest rates can't be cut much further and real interest rates cannot be substantially reduced.

This concern is very much to the point. Indeed, as we are writing this, the world economy is flirting with the possibility of several demand shocks. Over the past year, aggregate demand across the world suffered from the Chinese economy going into deleveraging mode. That danger seems to have passed by for the time being as the Chinese government has been taking action to inject new demand (but also new debt!) in the economy. The source of a second world demand shock resides in the Federal Reserve policy of returning to a monetary policy of increasing policy

interest rates. While, at first sight, the US economy could be thought of as being sufficiently strong to withstand (slow) hikes in interest rates, the danger is that the impact of higher interest rates in the US on the rest of the world is seriously underestimated. Stricter monetary policy by the Fed is certain to unleash financial market turmoil (in particular in the emerging world that would suffer from major capital outflows and from higher interest rate bills in particular on their dollar denominated loans). In turn, this emerging market turmoil, together with a stronger dollar, will boomerang back into the US economy and this to an extent that the Fed may now be underestimating.

Last but not least, there is the scenario of "Brexit", a "scenario" which after the referendum actually becomes more of a reality. While "Brexit' or at least the uncertainty surrounding it would be harmful for the British economy itself (OECD puts the cost at GDP being 3% lower in 2020 than otherwise would have been the case and this even with continued EU membership), the impact on the rest of the European Union and the world economy is also clear and this in the form of unwelcome currency strengthening, financial markets getting short circuited again and the possibility of unleashing an even deeper attack on workers' rights in the UK followed by a new wave of social dumping across Europe.

Conclusion

The Economic Outlook the OECD published recently can be seen as constituting representing a step forwards in this process of (finally) inserting a dose of rationality in the economic policy discussion. It also points at the extent to which the model of mainstream economics, based as it is on relentless austerity and downwards wage flexibility, is showing cracks that no longer can be mended by artificially injecting new financial bubbles. Let's hope policy makers themselves (central banks, governments) will see the writing on the wall in time and, instead of reacting to the renewed threats to the world economy by reverting once again to deflationary policies, will do the opposite by injecting a good dose of coordinated public investment in the economy along with a restrenghtening of minimum wages and collective bargaining institutions.

Chapter 03:
The OECD and regular job protection: new findings but old policy recipes

The 2016 Employment Outlook released by the OECD devotes a specific chapter to the effects of a reform that reduces employment protection for regular workers. The OECD analyses the effects of such a reform on the quantity of jobs over the long run as well as over the short run, thereby also including the case when such reform is implemented in the middle of an economic downturn. Besides estimating the impact on the number of jobs, the OECD also discusses the consequences on the segmentation of the labour market in the form of a high share of fixed term contracts.

1. Job protection and the quantity of jobs

Interesting findings...

One thing that is clear from the OECD's Outlook (even if one has to delve a bit in the body of the text to read this) is that policy makers should not get their hopes up on the idea that 'easy firing' will boost the economy's capacity to create (net) new jobs.

Indeed, the OECD now adheres to the theory that firms, when confronted with positive firing costs, will tend to reduce both hiring as well as firing of workers. Whether job protection has a negative effect, no effect at all or even a positive effect on employment performance is therefore an empirical question. In its Outlook, and based on the usual econometrics, the OECD concludes that it cannot be shown that cutting job protection will have a statistically significant effect on the employment level of the business sector in the long run.

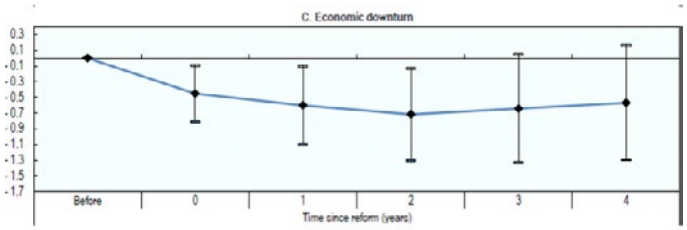
Moreover, it's worth noting that the OECD is only simulating the impact on wage employment, not on total employment in the business sector. Hence, to the extent a loosening of job protection would be accompanied by workers who otherwise would be in self-employment but are now accessing wage employment, the OECD's estimate of the impact on the number of jobs may even be overestimated. The possibility that loosening job protection would then actually result in a reduction in jobs in the long term destruction cannot be excluded.

At the same time, the OECD does detect negative effects from tinkering with job protection in the short run. Two years after a reform that reduces job protection, the business sector records relatively high job losses while wages are also significantly lower.

To understand why the impact on jobs is negative in the first couple of years, the OECD offers the explanation that, while some employers will immediately grasp the opportunity of 'easy firing' to get rid of redundant workers, other employers will need time to build up the new equipment that is necessary to undertake new activities or to match (unemployed) workers with their vacancies. Hence, negative job effects would outweigh the positive effects in the short run.

While this finding of short-run negative job effects is important, things get even more interesting when the OECD estimates the scenario of a cut in job protection taking place at the moment the economy is in a downturn. The graph below shows the result: over the first years after the reform, job losses are quite high - 0.7% of business sector employment is lost. This is rather substantial compared with an annual trend growth of business sector employment of 0.8% over the period 1990-2012. Moreover, the jobs pattern that follows the employment trough is flat. In other words, when reform is undertaken in a downturn, employment goes down significantly but it also stays down even four years after the reform.

Figure 32: Estimated cumulated change of business sector employment after a flexibility-enhancing EPL reform



Moreover, it is to be noted that this simulation does not distinguish between an ordinary economic downturn and a crisis situation where monetary policy has reached the zero bound for interest rates. In the former case, the central bank is able to come to the rescue by cutting interest rates. In this way, the economy can recover from the job losses inflicted by the loosening of job protection. In the latter case however, with nominal interest rates at zero, the central bank is 'out of ammunition'. This implies that job losses inflicted by the reform could be actually much higher and more permanent than the graph above would suggest. In this respect, it is interesting to read in footnote number 11 of the OECD chapter that '(...) effects might be aggravated by negative interactions with aggregate demand. This would be the case, for example, of reforms implemented when monetary policy has hit the zero bound (....).'

.... but back to the old recipes

Previous findings testify to the dangers of continuing with the type of reforms that reduce job protection even when economic activity is weak, inflation is already too low and too close to the deflation borderline, and interest rates are already at zero.

One would therefore expect the OECD to take a more reserved view on the issue of EPL reform in such case. Unfortunately, however, the Employment Outlook excels itself in inventing all sorts of theories as to why and how lowering job protection should and can be done at all times, even in times of economic downturn.

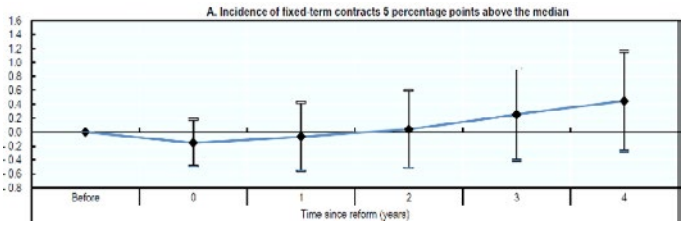
One theory claims that a reform of regular job protection in a labour market with a very high share of temporary contracts will not make a difference to the process of job destruction as such a process will already be ongoing, driven as it is by simply letting temporary employment contracts expire.

Another theory is to go for the full deregulation of labour markets and argue that by giving precedence to firm-level collective bargaining, trade unions or workers can strike agreements to cut wages, thus saving jobs that otherwise would be scrapped because of the loosening of employment protection.

Loosening job protection in a dual labour market: But what about the downturn?

Returning to the econometrics' drawing table, the OECD then simulates the effect of loosening job protection for regular workers specifically in those labour markets where the share of temporary contracts is high (5 percentage points above the median). Contrary to the conclusions from the simulations quoted above (and which refer to all economies, not just those economies with a high share of temporary work), the OECD no longer finds that a loosening of regular job protection significantly destroys jobs in the first two years (see Figure 33).

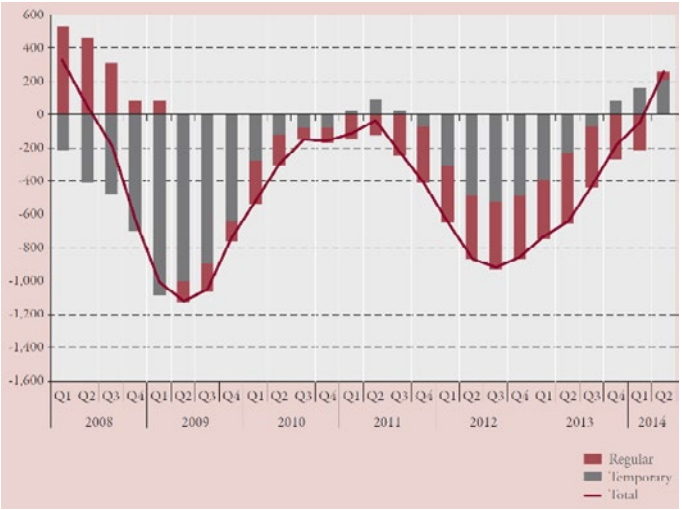
Figure 33: Estimated cumulative change of business-sector employement up to 4 years following the reform, in percentage



However, in presenting this latter simulation, the OECD conveniently glosses over the most pressing issue at this moment which is the question of the impact of a loosening of regular job protection when undertaken at a time of an economic downturn. Indeed, the scenario of a reform of EPL being implemented in a highly precarious labour market that is at the same time undergoing a downturn, is not being explored by the OECD. If the downturn is serious enough, the process of shedding labour may not limit itself to the non-renewal of temporary contracts but will also eat into the stock of open ended contracts. In that case, any loosening of regular job protection will be seized upon by business to accelerate the destruction of open ended jobs and negative job effects will reappear.

The latter scenario has been at work in Spain. Beginning 2012, Spain, having a high share of temporary contracts, downgraded regular job protection at the same moment the economy was undergoing a deep downturn. Economic activity was shrinking by 2.6% in 2012 and an additional 1.6% in 2013. The outcome was that regular jobs, in particular through collective dismissals, started to be destroyed at the same rate as temporary jobs were being cut. Between the first quarter of 2012 and the second quarter of 2013, no less than 3 million regular jobs disappeared (see Figure 34).

Figure 34: Dependent employement losses by type of contract (year-on-year change, thousands)



Source: ILO Research Departement, based on INE.

Weaken regular job protection AND downwards flexible wage bargaining?

In search of evidence to support the second theory, the OECD again uses the case of reforms in Spain. Indeed, at the start of 2012, the Spanish government not only loosened up regular job protection, it also gave employers the possibility to cut wages at company level by deviating from collective agreements or even ending them.

Here, the OECD unleashes another econometric exercise, a so called 'regression-discontinuity model'. The latter basically tests whether the pattern of unemployment around the moment of reform shows an unexpected change that cannot be explained by the usual factors such as industrial production or retail sales. The OECD applies this model three countries where a major reform on job protection was recently implemented. The conclusion is that, whereas the regression does show an unusual increase in unemployment in Slovenia and Estonia around the time of reform, such an effect cannot be detected in the case of Spain (see Table 4).

Table 4: Recent EPL reforms and unemployement

Estimated average effect within 2 years from the reform in percentage points

	Estonia	Slovenia	Spain
Estimated average effect (% points)	1.92***	0.55*	0.08
	(3.29)	(1.88)	(0.13)
Observations	*84*	*84*	*84*
R-squared	*0.995*	*0.990*	*0.997*

This allows the OECD to suggest that Spain managed to avoid adverse short-term job effects from loosening job protection from materialising by making collective bargaining much more flexible at the company level. The OECD's policy conclusion that follows is predictable. Making collective bargaining more flexible, it is argued, can offset the initial job losses resulting from a reform of job protection. Jobs that have become less productive because of the fall in demand and that otherwise would have been scrapped by lifting of job protection can now be saved by company level bargaining and by forcing workers into brutal concessions ('your wage or your job').

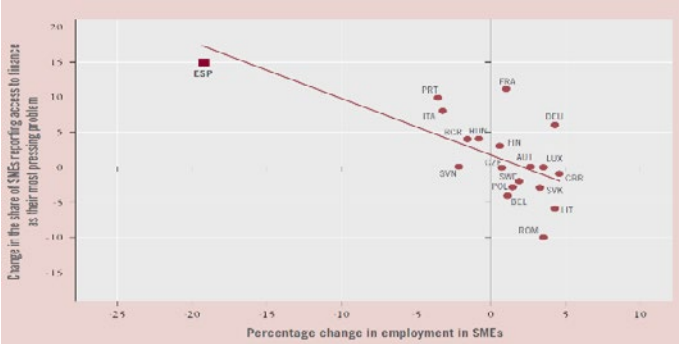
The OECD however is jumping to conclusions. One problem (which the OECD itself does raise although this is hidden in a footnote) is that wage losses from flexible company bargaining can feed back into the macro economy and into aggregate demand. The jobs being saved at individual company level from easy firing because of wage cuts then get lost anyway because the problem of a lack of aggregate demand becomes even more intense.

The other problem is that the modelling technique that is used by the OECD is not very reliable as it is also likely to capture the effect of all other changes occurring at the same time of the reform. While the OECD does recognise this caveat (this time in the main body of the text), it fails to raise the question whether other changes in policy or other events can explain this estimate of an almost zero effect of job protection reform in Spain.

One such event[70] having a major impact on jobs and unemployment in Spain at the time was the intervention of the president of the ECB mid 2012 in the financial market turmoil by openly stating the need to do 'anything it takes to save the euro'. For Spain, and especially for the SMEs in Spain, this made a huge difference. Indeed, in the years before 2012, Spanish SMEs had been hit by a serious credit squeeze: The share of SMEs in Spain reporting difficulties to access finance had gone up from 9% in 2008 to 25% in 2011 (see graph below). Lack of credit also resulted in an employment contraction in Spanish SMEs of 20% over that same period.

70 Another event might be the introduction of another precarious job contract at the same time as the job protection reform, offering small employers tax breaks and employment subsidies when hiring an unemployed person.

Figure 35: Access to finance and employement in SMEs, 2009-2011 (Percentage points and percentage)



Source: ILO Research departement, Base on Eurostat

Thanks to Mario Draghi's promise, this picture started to change. From mid-2012 on, interest rates charged and access to credit for Spanish business started to gradually ease from highly restrictive levels (see next graph), from 5.7% in August 2012 to 4.9% in June 2013. This loosening of the credit squeeze is likely to have played an important role in the pattern of evolution of unemployment over 2012-2013, the same period used by the OECD by its regression technique.

Figure 36: Interest rates on loans to non-financial corporations up to 0.25 million (percentage)

Source: ILO Research departement, Base on European Central Bank

In other words, if the OECD discovers a trend break in the behaviour of unemployment post-2012, this break has much to do with the change in financial conditions that Spanish business was facing in the years before and post 2012. Putting the trend break in the behaviour of unemployment down to the double labour market reform Spain initiated at the start of 2012 is therefore not well founded and remains unconvincing.

Employment Outlook versus the Economic Outlook

One of the key points made by the Economic Outlook the OECD published one month earlier was to take a more careful approach concerning the agenda of structural reform. The Economic Outlook pointed to the risk of reforms deepening and prolonging the crisis by further depressing demand when these reforms are undertaken in a period of crisis and when monetary policy is already near the zero bound on nominal interest rates. (See here https://www.hse.ru/data/2016/03/06/1125706157/1216011e.pdf). This is in particular the case with reforms putting downward pressure on wages.

While the new Employment Outlook does provide similar evidence of the immediate dismal effects on jobs of reforming employment protection, it also excels itself in constructing arguments to show these dismal effects can be avoided. These arguments, as argued above, are not very convincing and actually boil down to implementing the type of reform another OECD flagship publication warned against just one month earlier: indeed, if job protection is loosened and if employers are given increased power to cut wages are increased, low inflation risks becoming deflation and low growth becoming renewed recession.

2. Job protection and the quality of jobs

If loosening regular job protection does not bring additional jobs in the long run and is dangerous for jobs in the short run, the question that raises itself why bother devoting so much attention to it?

Here, the OECD's Employment Outlook reply is to claim that reducing job protection for regular workers is necessary anyway as it would take to take away the incentive for employers to hire workers through all sorts of precarious contracts such as long chains of fixed term contract or short term agency work. In what is a strange twist of logic the OECD argues that reducing regular job protection would solve all the problems that precarious work contracts bring with them such as reduced access to training for fixed-term workers, the fact that temporary work contracts are char-

acterised by substantially lower wage rates than regular contracts (30% less on average across OECD), that workers tend to get stuck in such contracts and that they tend to have only partial access to social security rights. In other words, the OECD still clings on the old story, initially formulated by Friedrich Hayek, that protecting insiders against the vagaries of the markets comes at the expense outsiders who are then worse off.

An old but seriously flawed theory

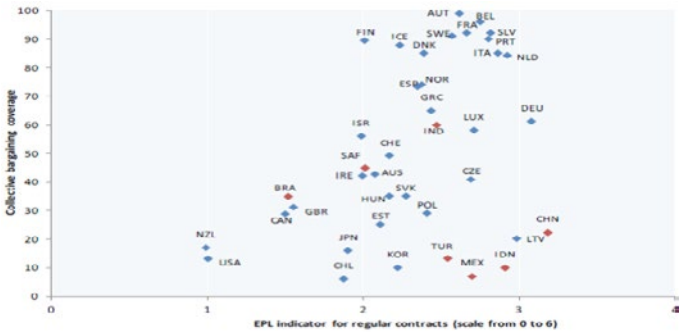
In taking this line of argumentation, two things are being forgotten.

First, let's recall the fact that it was institutions such as the OECD that pushed for the introduction of such flexible temporary work contracts, thereby pretending these were necessary in the new world of globalisation if new jobs were to be created. Two decades later, with regulation on temporary contracts having been loosened to an often extreme extent (in some economies, the same worker can be employed in the same job for the same employer through chains of fixed term contracts lasting as long as three to five years....), the OECD now concludes there is little or no evidence for these job creation effects but that, for the sake of inequality and social cohesion, the protection offered by regular contracts should be relaxed towards the levels of temporary contracts. This is disingenuous, to say the least.

Second, the problems created by precarious work contracts do not disappear but will actually come back as a boomerang by making all contracts, including contracts for regular workers, as flexible as possible.

- Yes, temporary workers have little access to training because the employer has no incentive to invest in them, as they can be easily got rid of in case of economic problems. However, workers on open-ended contracts will also be considered as a "commodity" and not as an asset to invest in, if the open-ended contract means workers can be fired almost overnight and without cost. Workers in unstable contracts will see their access to training reduced, irrespective of the fact whether the contract is formally temporary or an open ended one.
- Yes, temporary workers are seriously underpaid because they have weak bargaining power against employers who regularly make decisions over the renewal of their contracts. But so will workers on so-called open-ended contracts, as the threat of easy firing permits the employer to exert the same degree of power.
- In this respect, research has also pointed to the perverse dynamics of creating new and "real" insiders by the loosening labour law (See Kleinknecht ea. Rigidities through flexibility: flexible labour and the rise of management bureaucracy. Cambridge Journal of Economics August 2015). As unstable employment relationships (in combination with depressed wages) sap the loyalty and motivation of the work force, companies feel the need to install more positions to ensure oversight. This then results in thick layers of management jobs. And as the demand for managers increases, so does their remuneration. One of the reasons for the explosion of CEO- and managers' pay and bonus packages that is being observed across many economies can therefore be found in the flexibilisation of labour law. This is the real problem of insiders, but institutions such as the OECD tend to ignore this phenomenon.
- Yes, workers on precarious contracts have less access to social security. However, another effect of reducing job protection for many more workers is that it becomes much more difficult for trade unions to organise workers in unstable employment relationships (see graph for an illustration). And with lower membership, the trade union role in ensuring redistribution through taxes and transfers is reduced (see Jaumotte, F. and C. O. Buitron. 2015. "Power from the People," Finance & Development 52 (1): 29-31). The end result is, again, not higher equality on paper but in reality lower social benefits while the top 10% or 1% reap the tax benefits resulting in trade unions being less able to prevent cuts in social benefits.

Figure 37: Collective bargain coverage and strictness of employement protection legislation, 2013/2014



Note: Date for collective bargaining coverage refers to the most recent year available in the ICTWWS database. Data on EPL refers to 2013 (or 2012 when not available) and they capture the level of protection for individual and collective dismissals of regular contracts. Blue points represent advanced economies, red points developing ones.

Source: Authors' calculation based on OECD (EPL) and ICTWSS (collective bargaining)

In short, the OECD view that problems of labour market segmentation can be solved by making regular job contracts resemble the same type of flexibility that characterizes precarious contracts, is seriously confused. The OECD should not look at phenomena but instead at the forces that are really at work. The policy advice offered by the OECD's Employment Outlook will make the situation even worse. Instead, addressing precarious work practices should be based on the idea of 'levelling up'. All of the backdoors that employers have been given over the past decades to escape the respect of stable employment relationships need to be closed.

Reforms in practice: No impact on precarious work

Leaving aside the argument presented above and stating that more open ended contracts which are at the same time extremely flexible are anything but a good way forward, did such reforms at least improve the statistics by reducing the share of flexible contracts?

The OECD's Employment Outlook claims there is evidence for this. Its claim is that reforms of job protection in Spain and Slovenia indeed worked as they were supposed to work and that reducing job protection for regular workers makes employers offer more open ended contracts instead of fixed term ones.

The evidence the OECD presents to back up this claim is, once again, based on a 'discontinuity regression', the same methodology that was used to estimate the combined impact of deregulating both job protection as well as collective bargaining arrangements on the number of jobs (see chapter I above). According to the OECD estimate, the share of open ended contracts in new contracts increased by 10% and 3% in Slovenia and Spain respectively as a result of the reform (see Table 5).

Table 5: Recent EPL reforms and share of permanent contracts in new contracts

Estimated average effect within 2 years from the reform in percentage points

	Slovenia	Spain
Estimated coefficient (% points)	10.82***	3.12***
	(6.48)	(6.41)
Observations	63	84
R-squared	0.932	0.978

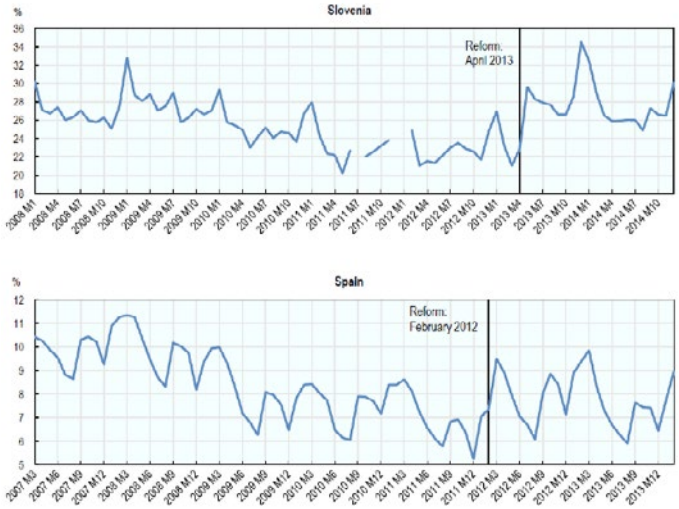
However, looking at the real numbers upon which the previous regression is based shows, certainly in the case of Spain, that the conclusion that the labour reform had a major impact on the share of permanent contracts has to be taken with a big grain of salt. Indeed, the reality is that the share of open ended contracts in all new contracts in Spain went up from a meagre 7% before the reform to a still meagre 10% after the reform (see second panel graph below). Moreover, if the series are prolonged to include 2014 (which the OECD does for Slovenia but strangely enough not for Spain), then the share of open ended contracts falls back to its pre reform level to reach again a dismal 5% by mid 2014. So while the counterfactual assessment on the basis of the OECD's regression sounds great at first sight, the reality is that precarious practice on the ground hardly budged. In addition, it should be noted that as was the case with the other discontinuity regression, other factors not accounted for in the OECD's regression could also be driving this small, if positive result. One factor here would be the parallel measure of offering tax credits to small companies hiring unemployed with an open-ended contract, tax credits which have to be paid back in case the worker is not retained for at least three years.

The case of Slovenia, as can be seen from the first panel of the graph below, is clearly different. In Slovenia, both the results obtained by the regression as well as the outright statistics point to some tangible results. The share of open ended contracts in new contracts appears to have increased from 22% to 28 to 30%, a result which looks decent compared to the Spanish one.

However, it should be stressed that the labour reform in Slovenia was much more about strengthening the protec-

tion for temporary workers than about cutting regular job protection. Indeed, besides reducing notification periods, Slovenia also outlawed employers from using a series of fixed-term contracts to fill in the same job for more than two years. Slovenia also imposed a 20% temping staff quota per firm, tried to stamp out bogus self-employment by a stricter control on the use of civil contracts and, finally, it raised employer social security contributions for employers using fixed term contracts. In Spain, however, it was actually the opposite. While regular job protection was being loosened in Spain, so was temporary job protection with small enterprises enjoying a prolonged probation period of one year in their employment contracts. All of this points to the fact that an approach to close the backdoors employers have at their disposal to avoid offering regular, open-ended contracts is much more efficient in addressing abuse of insecure contract than cutting job protection for regular contracts.

Figure 38: Share of permanent contracts in new contracts in Slovenia and Spain (Percentages)



Notes: The vertical lines indicate the dates the labour market reforms came into effect. The Slovenian date exclude group of 10 Social Security registrations with the same employers on the same day. Data for July and December 2011 as well as January 2012 were excluded from the chart, since administrative changes implied a re-registration of a large number of existing contracts.

Source: OECD calculation based on data from Servicio Público de Empleo Estatal (SEPE), Statistični register delovno aktivneg prebivalstva (SRDAP) and Institute of Macroeconomic Analysis and Development (IMAD)

3. The reform agenda the OECD hints at

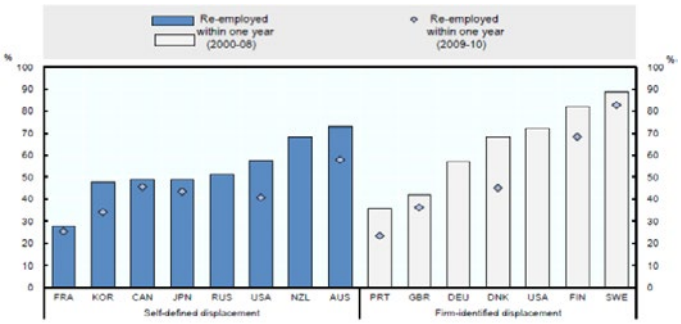
Finally, but hardly noticeable in the OECD's drive for flexible and easy firing, the Employment Outlook does hint at an alternative reform agenda when it states that notice periods are sometimes being used to activate employment agencies. In this way, the effect of an 'early warning' is combined with the active involvement of employment services.

Such systems exist in Sweden and other Nordic countries where relatively high notification periods (up to 6 to 8 months) are topped up with employment counselling agencies coming in to screen and interview the workers who are to be displaced, thereby offering these workers training or even the possibility of doing an internship in a new firm during the notification period. In turn these counselling activities are financed by sectorial funds that are financed by collectively bargained branch agreements.

Such an approach is a far cry from the hollow slogans of 'creative destruction', flexicurity and protecting the worker and not the job. It is rather about protecting the worker by protecting the job, the latter being done through long periods of advance notification with the former kicking in by using these long periods to prepare the worker for productive change instead of letting him or her brutally fall into the abyss of unemployment.

Is it therefore a surprise that a country like Sweden that use such a system of 'productive job protection' has the highest re-employment rate for displaced workers, a rate that is as high as 90%? (See Figure 39).It is unfortunate the OECD did not put much more emphasis on such policies.

Figure 39: Re-employment rate for displaced workers within one year, percentages



Source OECD (2013), Employement Outloo, Chapter 4

Annex: Monetary policies and their results by Central Bank

At the time of writing, six central banks have introduced negative interest rates under different conditions. In chronological order, these are the Danish Central Bank, the European Central Bank (ECB), the Swedish Riksbank, the Swiss National Bank (SNB) and the Bank of Japan (BoJ). Most recently in mid-March, the Central Bank of Hungary also introduced negative interest rates. Given the relatively low level of -0.05% and the short time-frame, an evaluation of their impact is complicated and not included in this review.[71]

Danish National Bank

MAIN OBJECTIVE: KEEPING THE CURRENCY PEG TO THE EURO WHICH IS IN PLACE SINCE 1982 - FIRST TO THE GERMAN MARK AND LATER TO THE EURO.[72]

Measures:

- Certificates of deposits (the rate at which banks can hold reserves at the Danish National Bank) stand at -0.65% (May 2016). This rate was negative from July 2012 to April 2014 and is again since September 2014. All other interest rates the national bank has influence over are at or close to zero.[73]
- Intervention in the foreign reserve market to stabilize the exchange rate: in January 2015 the Danish National Bank bought Euros in the amount of DK106.5 billion equivalent to USD 16.4 billion.[74]
- In response to the increasing speculative capital flow after Switzerland abandoned its ceiling towards the Euro in January 2015, the National Bank asked the government to stop issuing government bonds and limit the availability of investment nominated in Danish Krona. [75]
- Commercial Banks hold deposits at the National Bank and also a current-account deposit for transfers between commercial banks or any kind of payments, similar to a regular current account and savings account. In order to avoid a bypassing of the negative interest by simply shifting deposits to the current account where interest rates are currently 0.0%, the Danish National Bank put a ceiling on the current account deposit which was raised in March 2015.

71 Reuters/CNBC (2016) "Hungary central bank cuts deposit rate into negative territory", March 22, available at: http://www.cnbc.com/2016/03/22/hungary-central-bank-cuts-deposit-rate-into-negative-territory.html

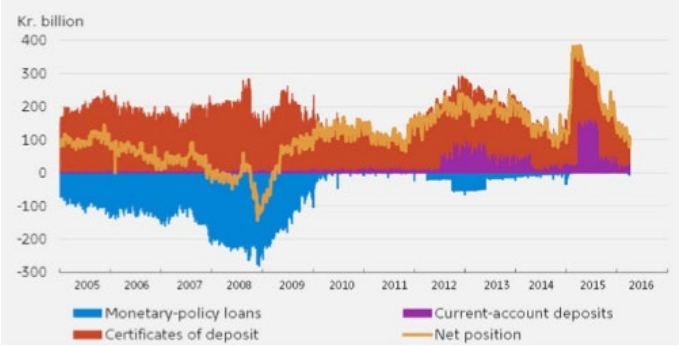
72 Paul Hannon (2015) "Danish Central Bank Governor Lars Rohde Pledges to Defend Currency Peg", The Wall Street Journal, March 12, available at: http://www.wsj.com/articles/danish-central-bank-governor-lars-rohde-pledges-to-defend-currency-peg-1426168038

73 Danish National Bank (2016) Official Interest Rates, available at: http://www.nationalbanken.dk/en/marketinfo/official_interestrates/Pages/Default.aspx

74 Richard Milne (2015) „Danish central bank fiercely defends currency peg", Financial Times, February 6, available at: http://www.ft.com/intl/cms/s/0/d3c385f6-adc6-11e4-919e-00144feab7de.html#axzz3kOH6RQTc.

75 Elaine Moore and Richard Milne (2015) "Danish borrowing costs plummet after debt sale halt", Financial Times, February 2, available at: http://www.ft.com/intl/cms/s/0/df543330-aacd-11e4-81bc-00144feab7de.html#axzz484ig0mkQ.

Figure A1: Use of monetary-policy instruments



Note: The net position is the monetary-policy counterparties' total net accounts in kroner with Danmarks Nationalbank for monetary-policy purposes. It is defined as the counterparties' holdings of certificates of deposit and current-account deposits less monetary-policy loans. The most recent observations are from 4 April 2016.

Source: Danish National Bank (2016) Monetary Policies, January.

Results:

- The stabilisation of the exchange rate was successful and the Krona fluctuated around 7.45 Krona per Euro and within the targeted limits of +/- 2.25%.[76]
- According to the Danish National Bank the pass through of lower interest rates has not weakened with the introduction of negative interest rates. While they have not been fully passed on to bank deposits and lending rates to households, large depositors such as firms and institutional investors do pay negative interests. This has so far not resulted in a substantial increase in cash holdings.[77]
- Inflation, which was mainly driven by house prices in 2015 is below 1% since the beginning of 2014 and stands at 0.0% (April 2016) on a year-on-year comparison.[78]
- Export have been stable and even increased slightly, benefiting from the stability of the exchange rate. [79]
- Yields fell below those of German and Japanese bonds to the second lowest after Swiss bond yields.[80]
- There have been reports of people receiving negative interest rates on their mortgage but banks are reluctant to advertise general statements or publish data.[81]
- Real estate prices are surging dramatically, increasing by 11.6% within the last year and by over 50% since 2009. The IMF has warned that prolonged low interest rates could fuel housing bubbles in an environment of low growth.[82]
- Profits of the Danish National Bank related to their intervention in the foreign reserves market yielded 3.6 billion Krona (roughly USD 550 million)[83]

76 Danmarks Nationalbank (2016) Report and Accounts, March, p. 12, available at: http://www.nationalbanken.dk/en/publications/Documents/2016/03/Report_and_accounts_2015.pdf

77 Carina Mosel and Jensen and Morten Spange (2015) Interest Rate Pass-through and the Demand for Cash at Negative Interest Rates, Monetary review 2nd Quarter 2015, p. 2, available at: https://www.nationalbanken.dk/en/publications/Documents/2015/06/Interest%20Rate%20Rass-through%20and%20the%20Demand%20for%20Cash%20at%20Negative%20Interest%20Rates.pdf

78 Statbank (2016) Statistics Denmark.

79 Ibid.

80 Elaine Moore and Richard Milne (2015) "Danish borrowing costs plummet after debt sale halt", Financial Times, February 2.

81 Charles Duxbury and David Gauthier-Villars (2016) "Negative Rates Around the World: How One Danish Couple Gets Paid Interest on Their Mortgage", the Wall Street Journal, April 14, available at: http://www.wsj.com/articles/the-upside-down-world-of-negative-interest-rates-146064311

European Central Bank

MAIN OBJECTIVE: INCREASE INFLATION, SPUR INVESTMENT AND DEMAND

Measures:

- Introduction of a negative deposit facility for overnight deposits of Banks in June 2014 applicable to all deposits and reserves in excess of the minimum reserve; March 2016: 0.4%.[84]
- Asset purchase programme of 60 billion Euros per month for sovereign bonds and securities started in March 2015; increased to 80 billion in April 2016 and extended to euro-denominated bonds issued by non-bank corporations established in the euro area; total volume: 1.2 trillion Euros. [85]
- Longer-term refinancing operations (TLTRO) started in September 2014 will be continued until March 2017 with quarterly target longer-term refinancing operations with a four-year maturity; as of the end of March 2016 this program totaled 462.73 billion Euros. [86]

Results:

- Decline of net interest income of 81% in surveyed banks in the last 6 months and the expectation of further deterioration. [87]

82 CPH Post online (2016) "IMF urges Denmark to drop negative interest rates", May 9, available at: http://cphpost.dk/news/imf-urges-denmark-to-drop-negative-interest-rates.html

83 Danmarks Nationalbank (2016) News from Nationalbanken – Prosperity in Denmark is keeping up, 1st Quarter 2016 – No. 1, p. 4, available at: http://www.nationalbanken.dk/en/publications/Documents/2016/03/News_from_Nationalbanken_No_1_2016.pdf

84 European Central Bank (2016) Key ECB interest rates, available at: https://www.ecb.europa.eu/stats/monetary/rates/html/index.en.html

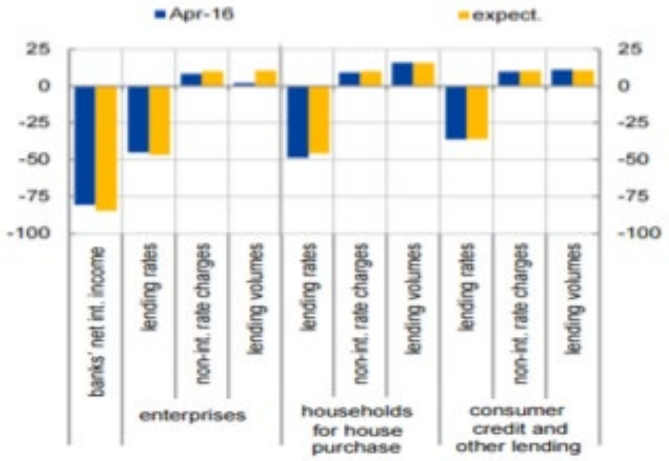
85 European Central Bank (2016) "ECB adds corporate sector purchase programme (CSPP) to the asset purchase programme (APP) and announces changes to APP", March 10, Press release; European Central Bank (2016) "ECB announces new series of targeted longer-term refinancing operations (TLTRO II)", March 10, Press release; Bruegel Policy Contribution (2015) European Central Bank Quantitative Easing: The Detailed Manyual, Issue 2015/2, March; European Central Bank (2014) "ECB allots €82.6 billion in first targeted longer-term refinancing operation", September 18; European Central Bank (2016) Open market operations, available at: https://www.ecb.europa.eu/mopo/implement/omo/html/index.en.html

86 Ibid.

87 European Central Bank (2016) The euro area bank lending survey, p. 27/28, available at: http://www.ecb.europa.eu/stats/pdf/blssurvey_201604.pdf?62706d1f446edb3d029bf00251b7a665

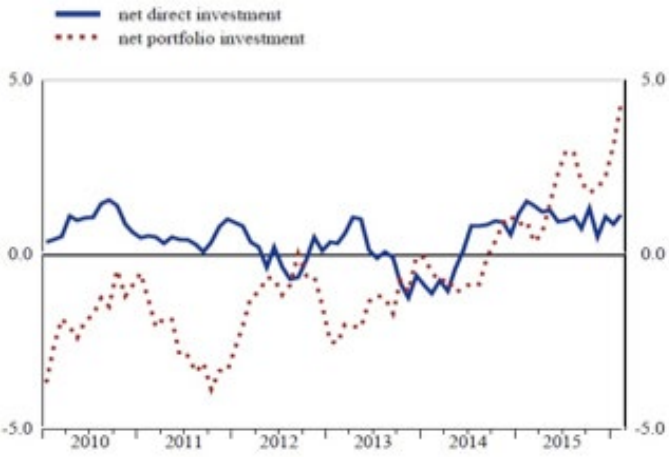
- Less than half of banks reported a translation of negative deposit rate into lower lending interest rates (45% for business loans and 49% for household loans).[88]
- Business loans increased only in 2% of surveyed banks and household loans in 16%. Only 11% of banks expect business loans and 16% household loans to pick up in the next 6 months.[89]
- Credit conditions eased but mainly for loans to large enterprises.[90]
- Deposits of banks at the ECB stood at 24 billion Euros in April 2014[91] and increased by 660% to 281.2 billion Euros until mid-April 2016.[92]
- Investments increased over the last year by 3.7% of GDP mainly through portfolio investments (4.3%) while direct investment has been much more moderate (1.1%).[93]
- Inflation declined slightly from 0.4% in 2014 to 0.0% in 2015 where it remains as of March 2016.[94]
- Euro-area Government Benchmark bond yield (10-year maturity) stands at 0.93% (March 2016), relatively unchanged to one year ago (0.95%, March 2015) with some volatility in between.[95]
- The value of the Euro against the USD and the Chinese Yuan declined dramatically between April 2014 and March 2015; in the last year this trend partly reversed which suggesting that the decline was more attributed to the unsolved European crisis.[96]

Figure A2: Impact of the negative deposit facility rate on banks' net interest margin and bank lending (net percentage of respondents)



Source: European Central Bank (2016) The euro area bank lending survey, p. 28

Figure A3: Euro-Area direct and portfolio investment (12-month cumulated transactions as a percentage of GDP)



Source: European Central Bank (2016) Statistics - 7 External Transactions and Positions.

88 Ibid.
89 Ibid.
90 Ibid.
91 European Central Bank (2014) "Consolidated financial statement of the Eurosystem as at 25 April 2014", April 29, available at: https://www.ecb.europa.eu/press/pr/wfs/2014/html/fs140429.en.html
92 European Central Bank (2016) "Consolidated financial statement of the Eurosystem as at 15 April 2016 ", April 19, available at: https://www.ecb.europa.eu/press/pr/wfs/2016/html/fs160419.en.html
93 European Central Bank (2016) Statistical Data Warehouse - 7 External Transactions and Positions, available at: http://sdw.ecb.europa.eu/reports.do?node=100000210
94 European Central Bank (2016) Statistical Data Warehouse – 4 Prices and costs, available at: http://sdw.ecb.europa.eu/reports.do?node=1000004821 and European Central Bank (2016) Inflation Dashboard, available at: https://www.ecb.europa.eu/stats/prices/hicp/html/inflation.en.html
95 European Central Bank (2016) Statistical Data Warehouse – Euro area 10-year Government Benchmark bond yield – Yield, available at: http://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=143.FM.M.U2.EUR.4F.BB.U2_10Y.YLD
96 https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-usd.en.html

Swedish Riksbank

MAIN OBJECTIVE: LOWER THE EXCHANGE RATE TO HELP EXPORTERS AND THE TOURIST SECTOR AND INCREASE INFLATION.

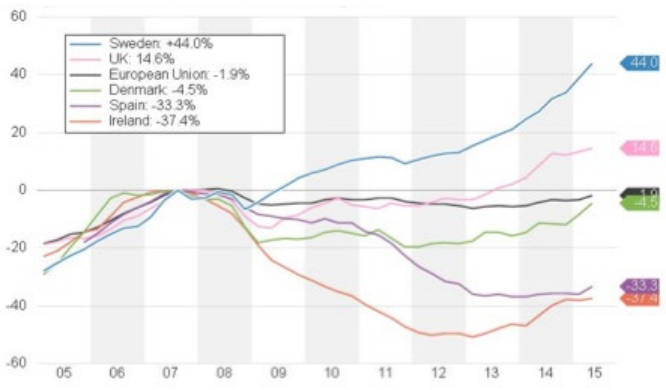
Measures:

- The deposit rate stands at -1.25% and has been negative since July 2014[97].
- The repo rate, which in Sweden is the policy rate of the Riksbank and the rate at which banks can borrow and deposit funds for up to seven days, has been negative since February 2015 and stands currently at -0.5%.[98]
- The Stockholm Interbank Offered Rate (STIBOR) for 3 month interbank lending stands at -0.416%.[99]
- The substantial quantitative easing program accumulates to 245 billion SEK corresponding to 30.3 billion USD (see Figure).[100]

Results:

- Deposit of banks increase after the introduction of negative rates.[101]
- There has been a stabilizing effects of the exchange rate against the Euro. The value of the Krona declined from 2012 until the end of 2014 and stabilized since then at around 10 Euro cents per Krona.[102]
- In international comparison, costs for Swedish banks are in general lower due to a more sustainable lending portfolio.[103] Therefore banks' profits do not seem to have taken such a beating as in other economies.[104]
- Inflation remains with 0.8% in March 2016 below the target of 2%. There are no signs of a direct reaction to monetary policy.[105]
- Housing prices have increased by 40% since 2008 accelerating particularly after 2012 (see graph).[106] This has increased the debt to disposable income ratio of households to 180%. It is expected to increase further.[107]
- There was a strong upward trend in the stock market, which even outperformed the American and European stock market (see Figure A4). However, this trend stalled in recent month, which the Riksbank attributs to an decrease of demand for high risk assets, higher volatility and risk premia.[108]
- Contrary to the rest of the global economy, Sweden's GDP performance was stronger than expected at the end of 2015 and has slightly slowed but remains positive in 2016. According to the Riksbank major factors were a lower value of the Krona and increased export activities despite a relatively constant demand for Swedish export products. Strong consumption, including public spending generated in parts by the influx of refugees has contributed as well. The contribution of monetary policy is not obvious.[109]

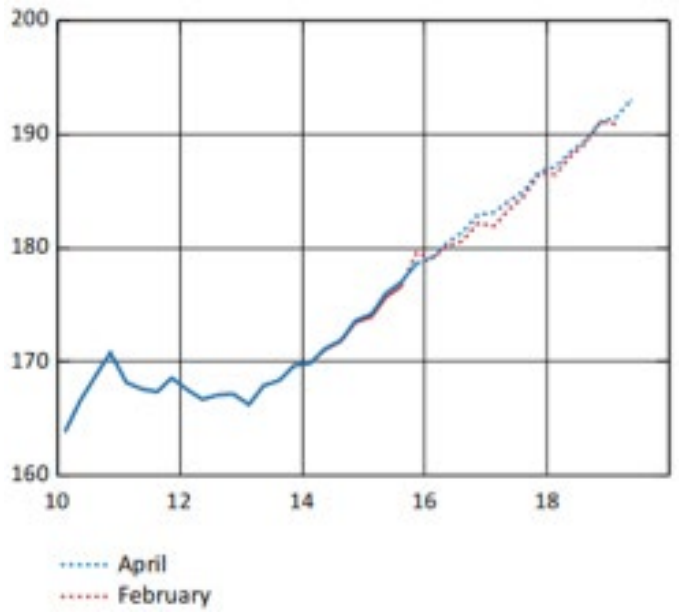
Figure A4: Sweden house prices vs other European markets (Q3 2007 = 100)



Source: Ross Finley (2015) "Swedish housing market keeps cheering the Riksbank", Reuters, October 28.

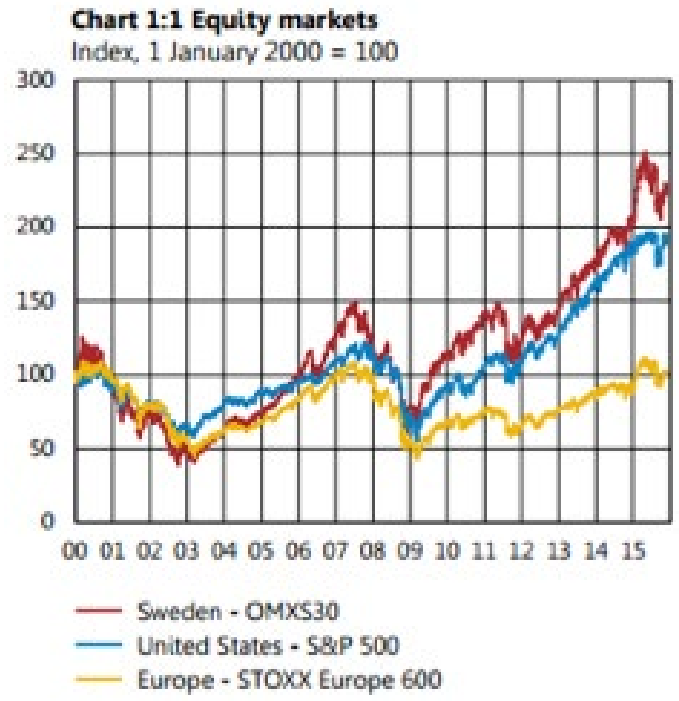
97 Trading Economics (2016) Sweden Interest Rate, available at: http://www.tradingeconomics.com/sweden/interest-rate
98 Swedish Riksbank (2016) Monetary Policy Report, February 2016, available at: http://www.riksbank.se/Documents/Rapporter/PPR/2016/160211/rap_ppr_160211_eng_ii30Bclo2.pdf
99 Ibid.
100 Swedish Riksbank (2016) Monetary Policy Report, April 2016, p. 9, available at: http://www.riksbank.se/Documents/Rapporter/PPR/2016/160421/rap_ppr_160421_eng.pdf
101 Niklas Magnusson and Frances Schwartzkopff (2016) "Sweden's Banks Caught in Cash Burn as Deposits Swell to Record", January 10, available at: http://www.bloomberg.com/news/articles/2016-01-10/sweden-s-banks-caught-in-cash-burn-as-deposits-swell-to-record
102 European Central Bank (2016) Statistics – Swedish Krona, available at: https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-sek.en.html
103 Swedish Riksbank (2016) Monetary Policy Report, April 2016, p. 20
104 Swedish Riksbank (2015) Financial Stability Report, 2015:2, available at: http://www.riksbank.se/Documents/Rapporter/FSR/2015/FSR_2/rap_fsr2_151125_eng.pdf
105 Swedish Riksbank (2016) Monetary Policy Report, February 2016.
106 Ross Finley (2015) "Swedish housing market keeps cheering the Riksbank", Reuters, October 28., available at: http://blogs.reuters.com/macroscope/2015/10/28/swedish-housing-market-keeps-cheering-the-riksbank/
107 Swedish Riksbank (2016) Monetary Policy Report, April 2016, p. 12.
108 Swedish Riksbank (2015) Financial Stability Report, 2015:2, p. 5.
109 Swedish Riksbank (2016) Monetary Policy Report, April 2016, p. 27.

Figure A5: Household debt ratio (Percent of disposable income)



Source: Swedish Riksbank (2016) Monetary Policy Report, April 2016, p 12.

Figure A6: Equity markets (1 January 2000 = 100)



Source: Swedish Riksbank (2015) Financial Stability Report, 2015:2, p. 3.

Swiss National Bank (SNB)

MAIN OBJECTIVE: LOWER THE EURO/FRANC EXCHANGE RATE TO HELP EXPORTERS AND THE TOURIST SECTOR

Measures:

- The deposit rate stands at -0.75% (March 2016)[110] and is negative since December 2014[111]; it applies to all bank deposits above a certain threshold which depends on the minimum reserve requirements and is defined individually.
- Aim to keep the 3 month Swiss Franc LIBOR rate for interbank loans at the range of 1.25% to -0.25%; currently at -0.73% (March 2016); has been negative since December 2014.
- The Swiss Average Rate Overnight (SARON), which is the overnight lending rate for the interbank repo market, stands at -0.74% (March 2016). It has turned slightly negative various times since 2011 and is significantly negative since January 2015.[112]
- First intervention in the foreign reserve market in 2009 by buying Euros and increasing the foreign exchange reserves.
- Quantitative easing program in August 2011 through the expansion of the sight deposits of approximately 300 banks three times during August 2011 totalling CHF 170 billion, equivalent to 30% of Swiss GDP in 2011.[113]
- When in August 2011 the value of the France spiked up to over 95 Euro cents, the SNB announced a ceiling of 1.2 Francs per Euro in September 2011 by unlimited intervention in the foreign reserves market.[114] The ceiling was abandoned in January 2015 when speculation on an undervalued Franc added increasing pressure.[115] Total foreign reserves mount to more than 620 billion CHF (roughly 110% of the Swiss GDP).[116]

110 Schweizerische Nationalbank (2016) Quartalsheft 1/2016, available at: http://www.snb.ch/de/mmr/reference/quartbul_2016_1_komplett/source/quartbul_2016_1_komplett.de.pdf

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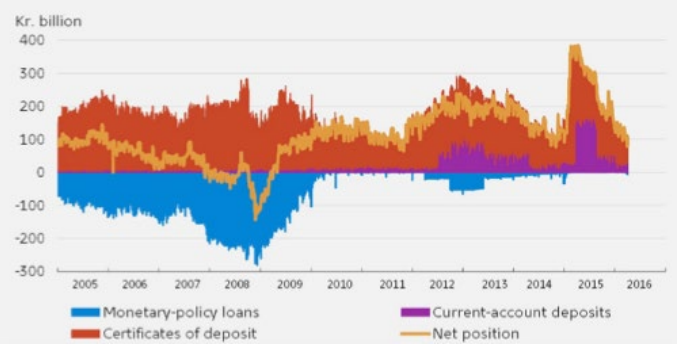
Results:

- The effect on the exchange rate has been moderate. The Franc has been falling since its highest value at the beginning of 2015 but its value is still roughly one-third above its value in 2008 (see graph).[117]
- Consumer prices declined by -0.9% in March 2016 (year-on-year comparison) and have been shrinking since September 2014.[118]
- The volume of loans to households has increased considerably as they benefited from lower interests and relaxed loan conditions; the loan volume increased by 17.6 billion Francs or 2.5% in the last year (December to December). [119]
- Also non-financial corporations benefited to some extent but this cooled in the last year when loans shrank slightly by -0.2%. Loans to financial corporations which are lower in their total amount and more volatile have contracted by -9.6% in the last year.[120]
- Deposits increased despite negative interest rates. In mid-March 2016 they stood at 481.3 billion CHF, an increase of over 30% from December 2014 when they stood at 369.2 billion CHF. The minimum reserve requirements were exceeded by 396.3 billion CHF, an additional increase from the already high level of excess reserves in December 2014 of 304.6 billion CHF.[121]
- Bank profits and net interest income has declined to 1% of assets.[122]
- The Alternative Bank Schweiz has passed on negative interest rates to their customers and as of the beginning of 2016 they charge 0.125% for deposits. The result was a shift from deposits to investments. The overall assets remained stable and the number of clients even increased slightly in net terms.[123]
- The yields for 10 year government bonds are negative at -0.25% and have been negative since July 2015.[124]

Figure A7: CHF-EURO exchange rate



Source: European Central Bank (2016) Statistics – Swiss Franc

117 European Central Bank (2016) Statistics – Swiss Franc, available at: https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-chf.en.html
118 Swiss National Bank (2016) Statistics – Consumer prices, available at: https://data.snb.ch/en/topics/uvo#!/cube/plkopr?fromDate=2014-03&toDate=2016-03&dimSel=D0(LD2010100,VVP)
119 Schweizerische Nationalbank (2016) Quartalsheft 1/2016, p. 27.
120 Ibid.
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Bank of Japan

MAIN OBJECTIVE: INCREASE INFLATION, SPUR INVESTMENT AND DEMAND

Measures:

- The bank of Japan introduced negative interest rates in January 2016 lowering the deposit rate to -0.10% which applies only to new deposits after December 2015; old reserves will still earn interests of 0.1%.[125]
- Quantitative easing programs has mounted to USD 733 billion per year in government bonds and other secured assets. Most recently, under increasing difficulties for the BoJ to find trading partners willing to sell their bonds.[126]
- In March 2016 total assets of the Bank of Japan stood at 3.6 trillion USD[127]
- In April 2016 the Bank of Japan maintained the current policy stance without up scaling their program, which some interpret as a signal that there is little more room for further monetary expansion.[128]

Results:

- 10-year bond yields turned negative in mid-February 2016 standing at -0.113% beginning of May 2016.[129]
- Inflation picked up in 2013 and stood at 2.7% in 2014; after then it declined and was 0.8% in 2015[130] and -0.1% in March 2016 (annual change).[131]
- Deposits increased by 2.9% in January 2016 and by 3.1% in February.[132]
- Loan growth remains with 2.2% annually (February 2016) moderate. [133]
- Output contraction in the fourth quarter of 2015 of -1.4%[134] Due to a contraction in consumption over the last six month on a year-on-year comparison alongside a decline of disposable income since the end of 2015.[135]
- Investment has chilled since the third quarter of 2015.[136]
- The value of the yen towards the dollar declined initially in 2012 to 2014 and has increased dramatically since the end of 2015 (see graph). The reasons are unclear and might include financial inflows from China considering Japan a safe haven and speculations.[137]
- Stock market declined as sign of bleak prospects for national exporting companies and foreign investor's profit.

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ABOUT THE AUTHORS:

Introduction
John Evans, General Secretary, TUAC

Chapter 01
Carolin Vollman, Economist, ITUC

Carolin Vollman was economist in the ITUC-Global Union's Washington Office until June 2016. She is now working for the German Trade Union Federation (DGB)

Chapter 02
Ronald Janssen, Senior Policy Advisor

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Chapter 03
Ronald Janssen, Senior Policy Advisor

Publisher responsible in law:
Sharan Burrow, General Secretary

ITUC
5 Bld du Roi Albert II, Bte 1, 1210-Brussels, Belgium
Tel : +32 2 224 0211 Fax : +32 2 201 5815
Email : press@ituc-csi.org Web : www.ituc-csi.org