Wages ~~in~~ and the low growth environment

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- Wage-led versus profit-led economic growth regimes
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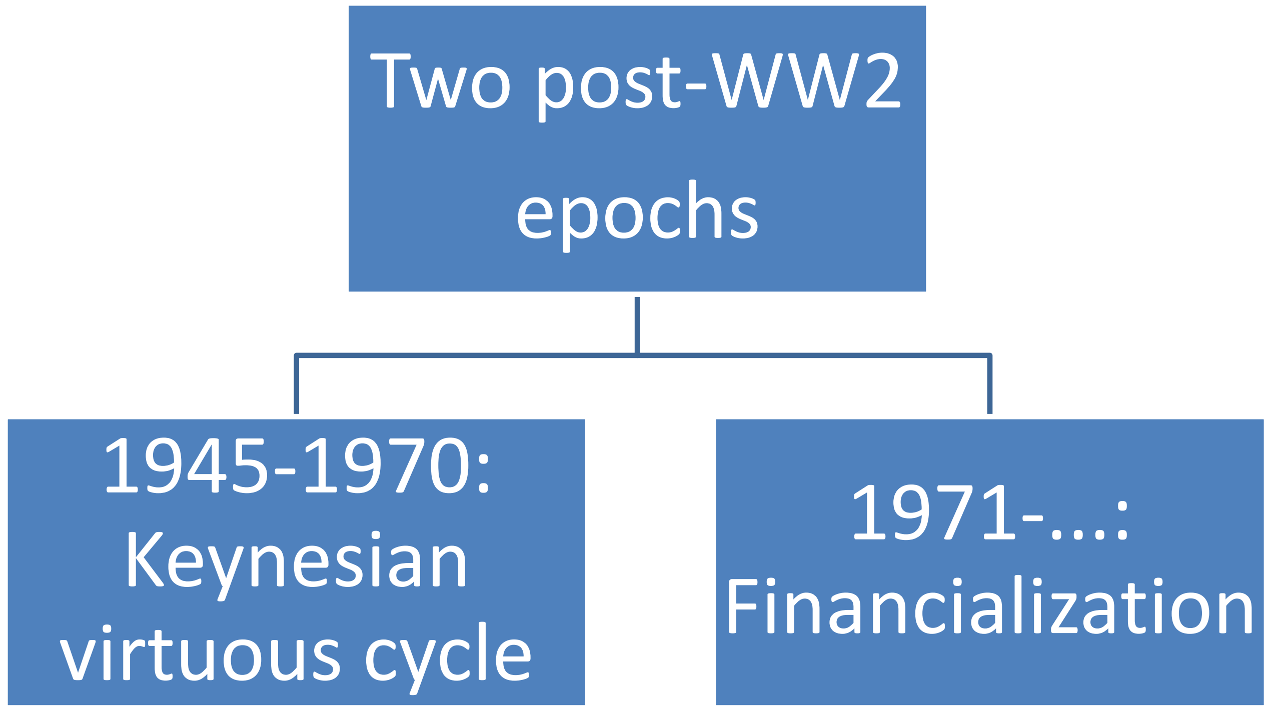
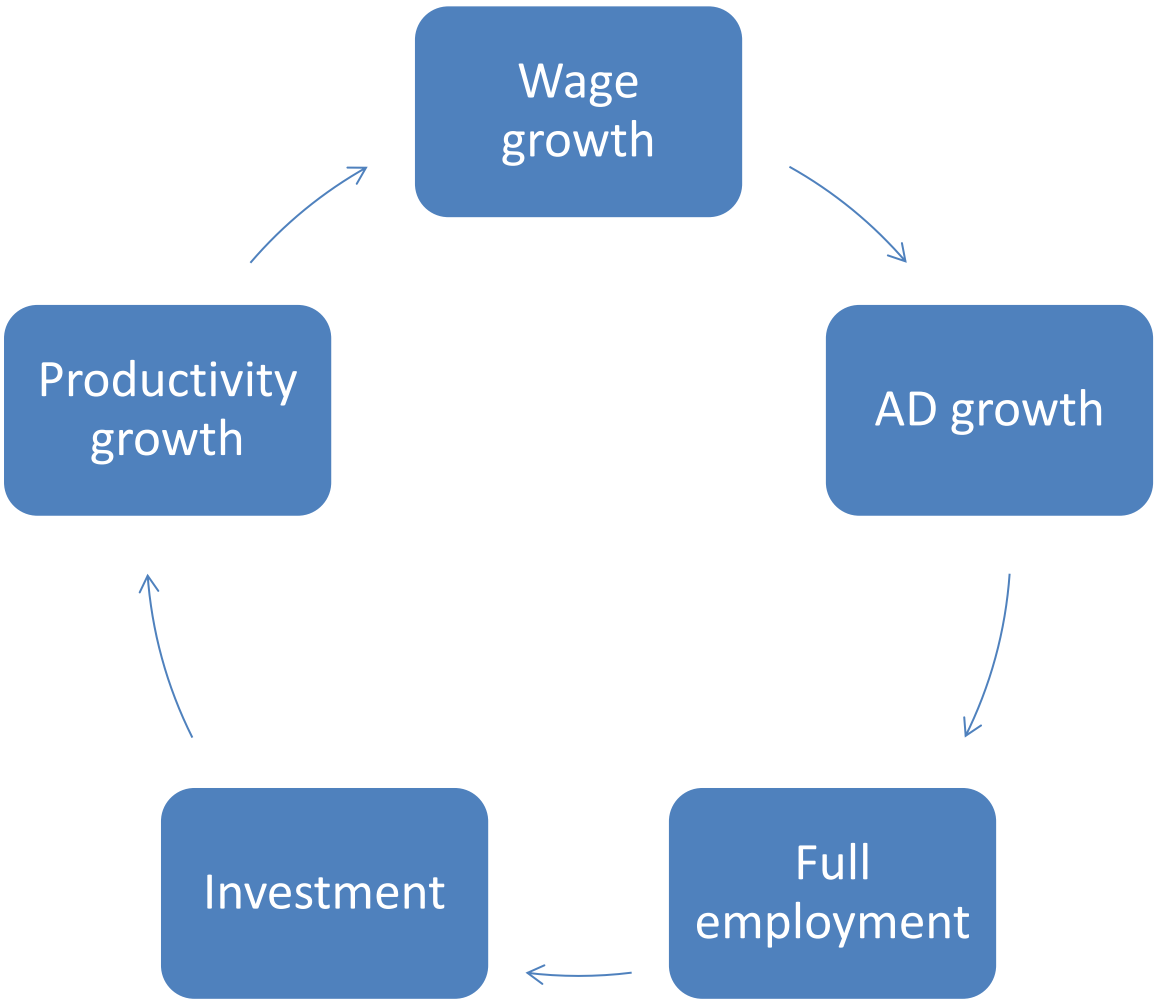
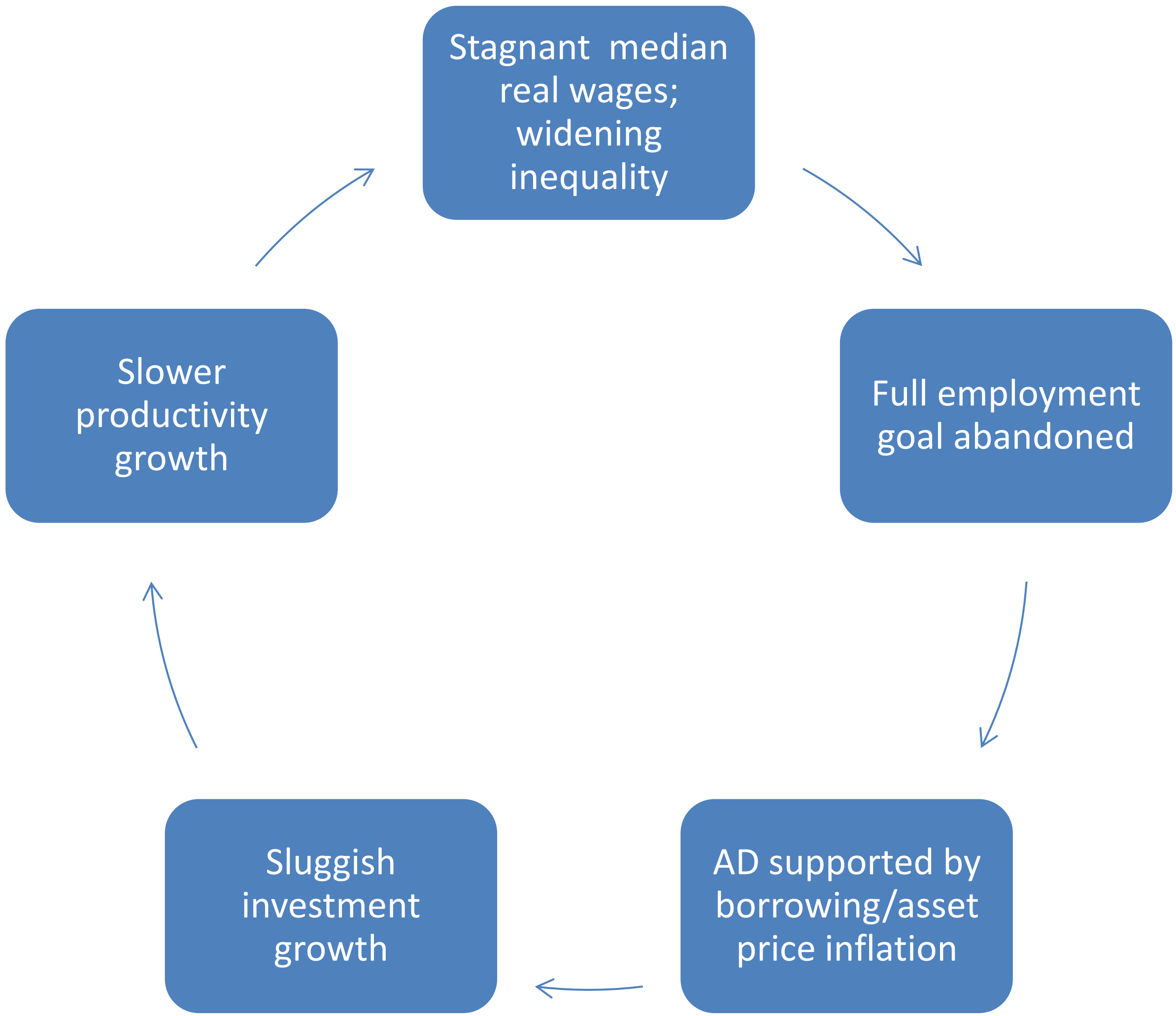
I. Stages of capitalism (after WW2)


Two post-WW2 epochs
1945-1970: Keynesian virtuous cycle
1971-...: Financialization

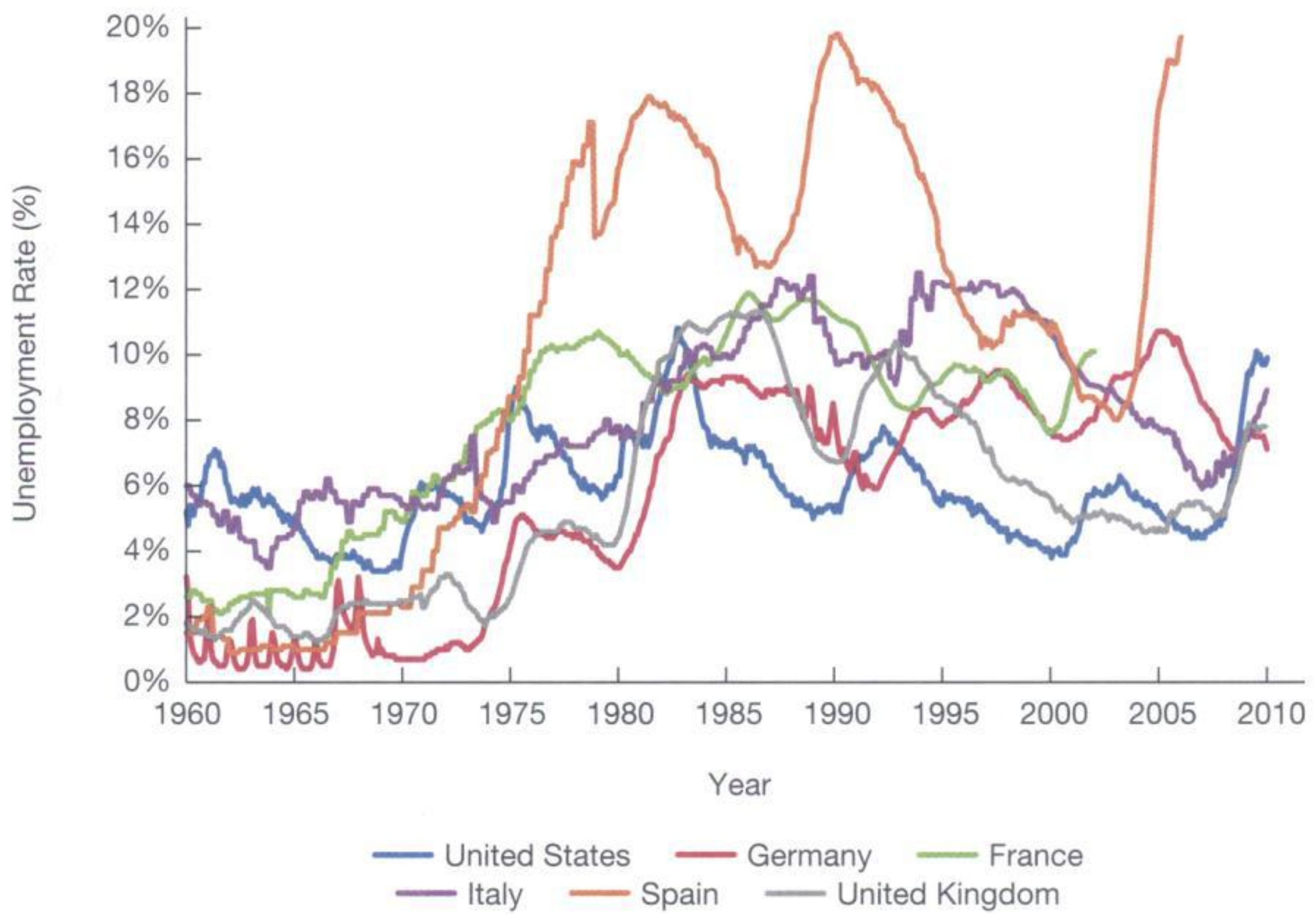
Virtuous Keynesian cycle



Financialization: the latest stage of capitalism

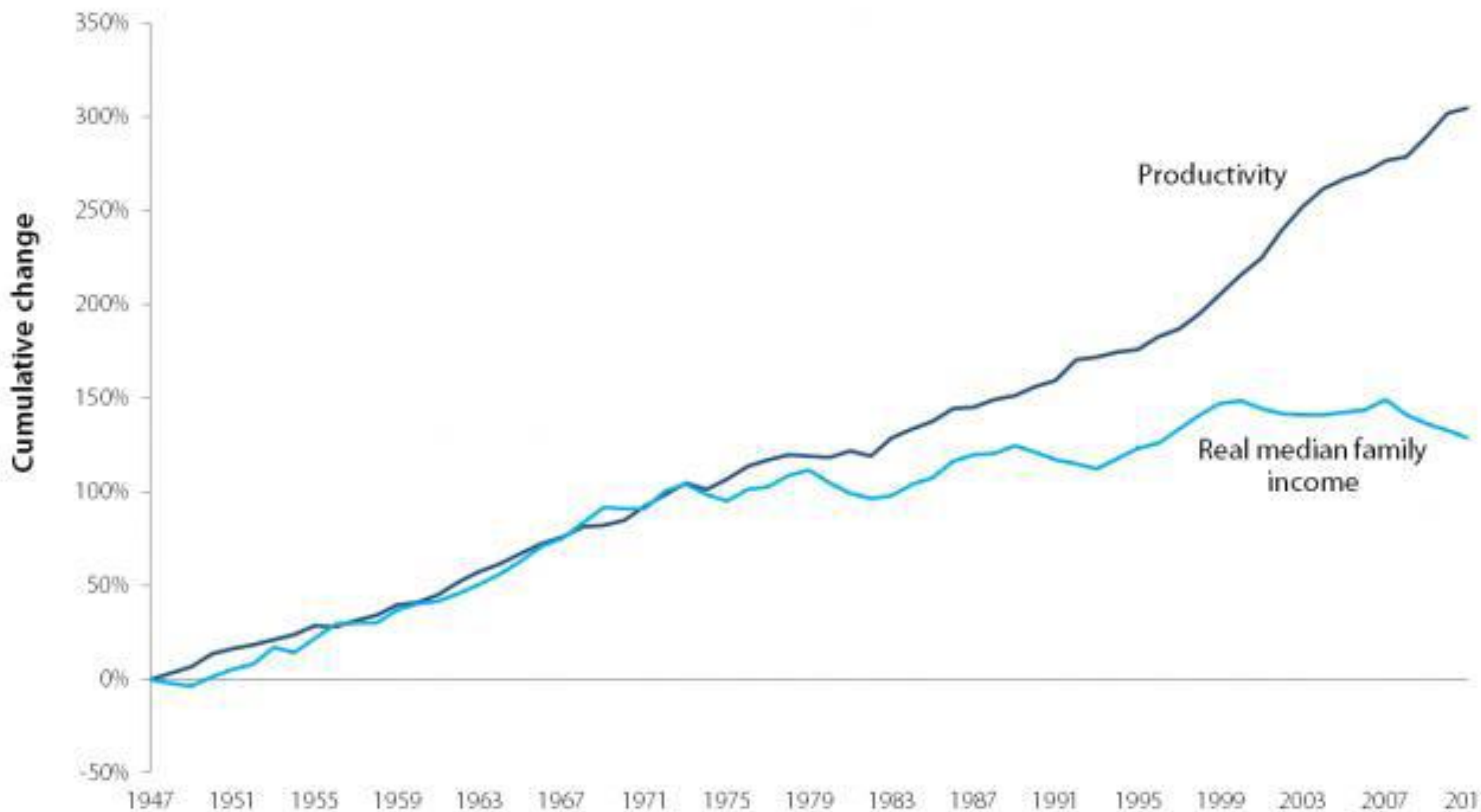


Full employment goal abandoned



Source: Eurostat, available at http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/ and Global Financial Data, available at www.globalfinancialdata.com/.

Productivity and stagnant real wages in the U.S. (Economic Policy Institute)



Source: Authors' analysis of Current Population Survey Annual Social and Economic Supplement *Historical Income Tables*, (Table F-5) and Bureau of Labor Statistics, *Productivity – Major Sector Productivity and Costs* Database (2012)

II. Mainstream versus unorthodox

Mainstream economics...

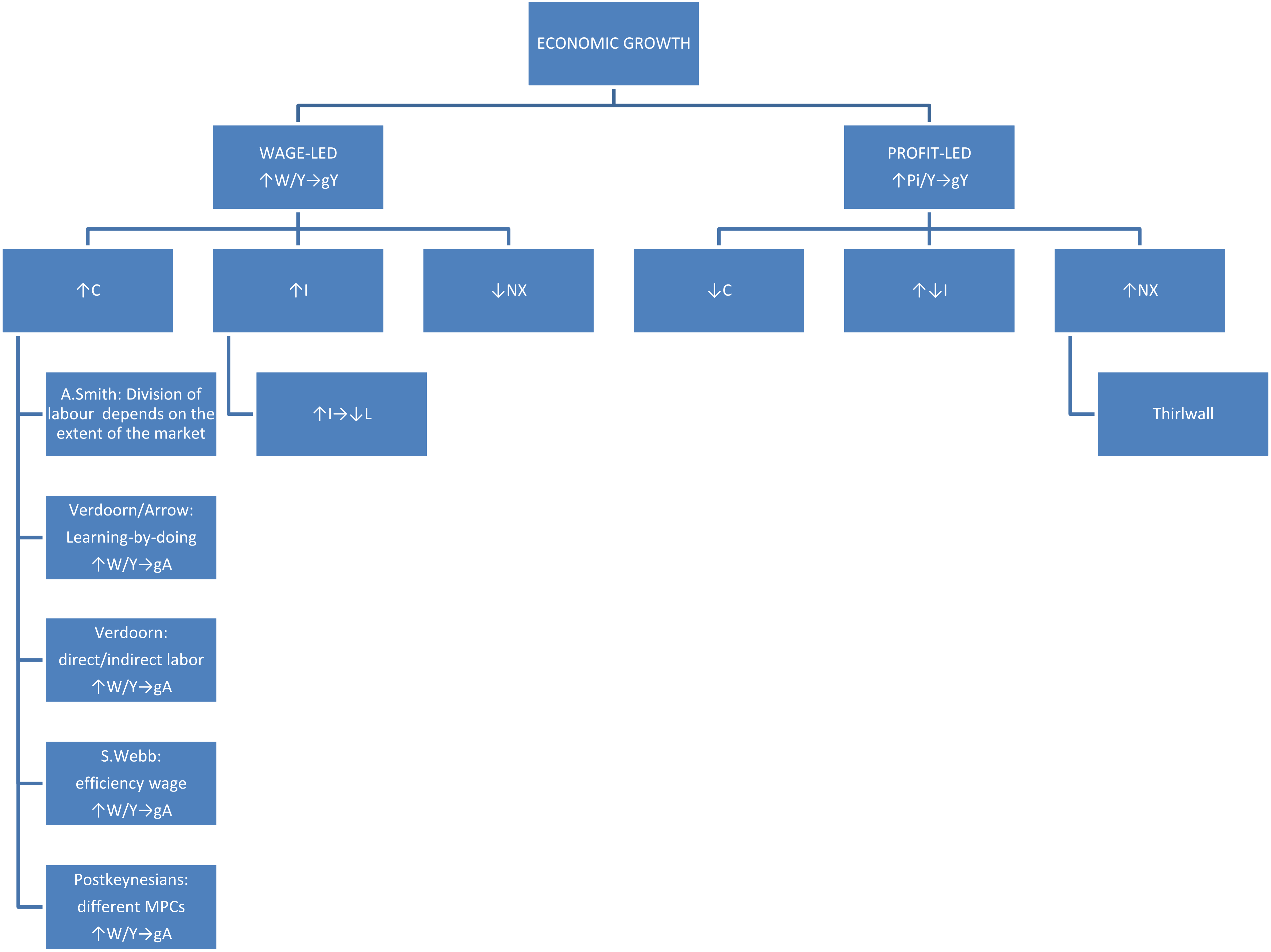
- ... appeals to **„natural rates“** of unemployment, output, growth and interest
- ... insists that employment, output, productivity are ultimately determined **only on the supply side:**

  $$Y/L = f\,(A(=T^*E);\,K)$$

- Mainstream **downward-sloping demand for labor curve** should be considered only as the **'<u>notional</u>' demand for labor** (Barro and Grossman, 1971), because this labor demand curve **takes no account of effective demand**.

Unorthodox (postkeynesian) economics...

- ... there are **no „natural rates“** of unemployment, output, growth and interest
- ... employment, output, productivity are determined **(mostly) by the demand side, not only by the supply side**
- **Paradox of costs** (Kalecki, 1939; Rowthorn, 1981) – if **higher real wages** generate **higher aggregate consumption, higher sales, higher rates of capacity utilization** and hence **higher investment** expenditures, **profit rates will be driven up** (a variant of **Marx's problem of the realization of profit**).



ECONOMIC GROWTH
WAGE-LED
↑W/Y→gY
PROFIT-LED
↑Pi/Y→gY
↑C
↑I
↓NX
↓C
↑↓I
↑NX
A.Smith: Division of labour depends on the extent of the market
↑I→↓L
Thirlwall
Verdoorn/Arrow: Learning-by-doing
↑W/Y→gA
Verdoorn: direct/indirect labor
↑W/Y→gA
S.Webb: efficiency wage
↑W/Y→gA
Postkeynesians: different MPCs
↑W/Y→gA

Economies of scale

- A vast empirical literature demonstrates the **irrelevance of the neoclassical U-shaped assumption of cost curves** while **supporting the L-shaped long-run total average cost curve** and the constant average variable cost curve.
- For example, **Alan Blinder et al. (1999)** endeavored to find the shape of the marginal cost curve, asking respondents about the behavior of their **"variable costs of producing additional units as production rises"** (p. 216):
  - **only 11 per cent answered that marginal costs were rising**;
  - 40 per cent said they were declining, and 49 per cent said they were constant.
- Blinder et al. (1999, p. 105) conclude that the managers' answers "paint an **image of the cost structure of the typical firm** that is **very different from the one immortalized in textbooks**".

Verdoorn‘s law

- **Verdoorn's law** (Dutch economist Petrus Johannes Verdoorn) pertains to the **relationship between the growth of output and the growth of productivity**. According to the law, **faster growth in output increases productivity due to increasing returns**.
- Verdoorn (1949, p. 59) argued that **“in the long run a change in the volume of production, say about 10 per cent, tends to be associated with an average increase in labor productivity of 4.5 per cent.”** The Verdoorn coefficient close to 0.5 is also found in subsequent estimations of the law. Nicholas Kaldor (1966, p. 289) reports a 0.484 coefficient.
- Verdoorn's law differs from the “the **usual hypothesis** … that the **growth of productivity** is mainly to be **explained by the progress of knowledge in science and technology**” (Kaldor, 1966, p. 290), as it typically is in **neoclassical models of growth** (e.g. the **Solow** model).
- Verdoorn's law is usually associated with **cumulative causation models of growth**, in which **demand rather than supply determine the pace of accumulation**.

Verdoorn‘s/Thirlwall‘s law (2)

- Nicholas **Kaldor** and Anthony **Thirlwall** developed models of **export-led growth based on Verdoorn's law**. For a given country an **expansion of the export sector may cause specialization** in the production of export products, which increase the **productivity level**, and increase the level of **skills in the export sector**. This may then lead to a **reallocation of resources from the less efficient non-trade sector** to the more productive export sector, **lower prices for traded goods** and **higher competitiveness**. This productivity change may then lead to expanded exports and to output growth.
- Thirlwall (1979) shows that for several countries the **rate of growth never exceeds the ratio of the rate of growth of exports to income elasticity of demand for imports**. This implies that **growth is limited by the balance of payments** equilibrium. This result is known as **Thirlwall's law**.

Direct/indirect labor

- Kalecki (1971, p. 44): divide labor into **direct and indirect labor**:
  - direct labor is **proportional to production;**
  - indirect labor is **proportional to productive capacity**.
- An advantage of making this distinction is that **Okun's law arises as a natural outcome**, there is **no need for explanations like "labor hoarding" etc**.
- Okun's law: a fall in the unemployment rate of 1% → some 2% increase in output.

Verdoorn‘s/Thirlwall‘s law (3)

Verdoorn, J. P. (1949), “On the Factors Determining the Growth of Labor Productivity,” in L. Pasinetti (ed.), *Italian Economic Papers*, Vol. II, Oxford: Oxford University Press, 1993.

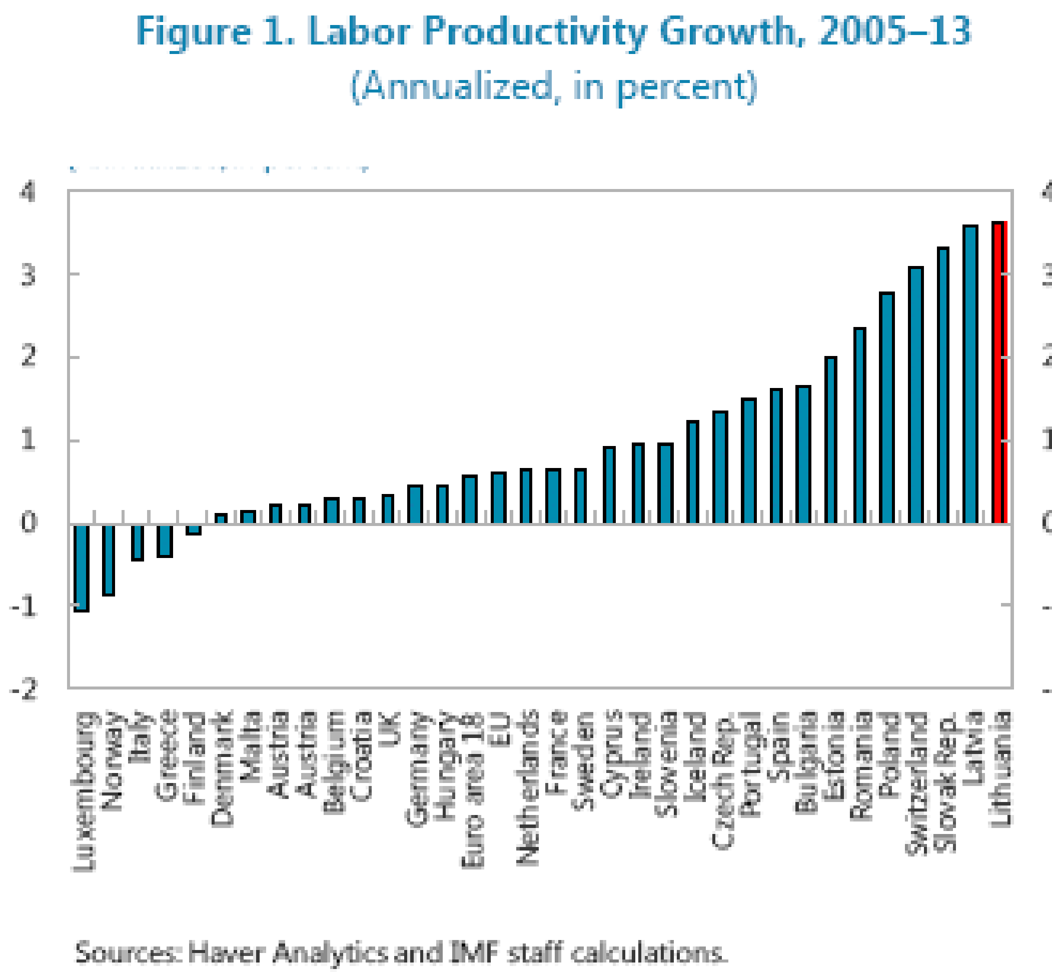
Kaldor, N. (1966), *Causes of the Slow Growth in the United Kingdom,* Cambridge: Cambridge University Press.

Thirlwall, A. P. (1979), “The balance of payments constraint as an explanation of international growth rate differences,“ *Banca Nazionale del Lavoro Quarterly Review*, March.

A refresher: productivity, distribution, pricing

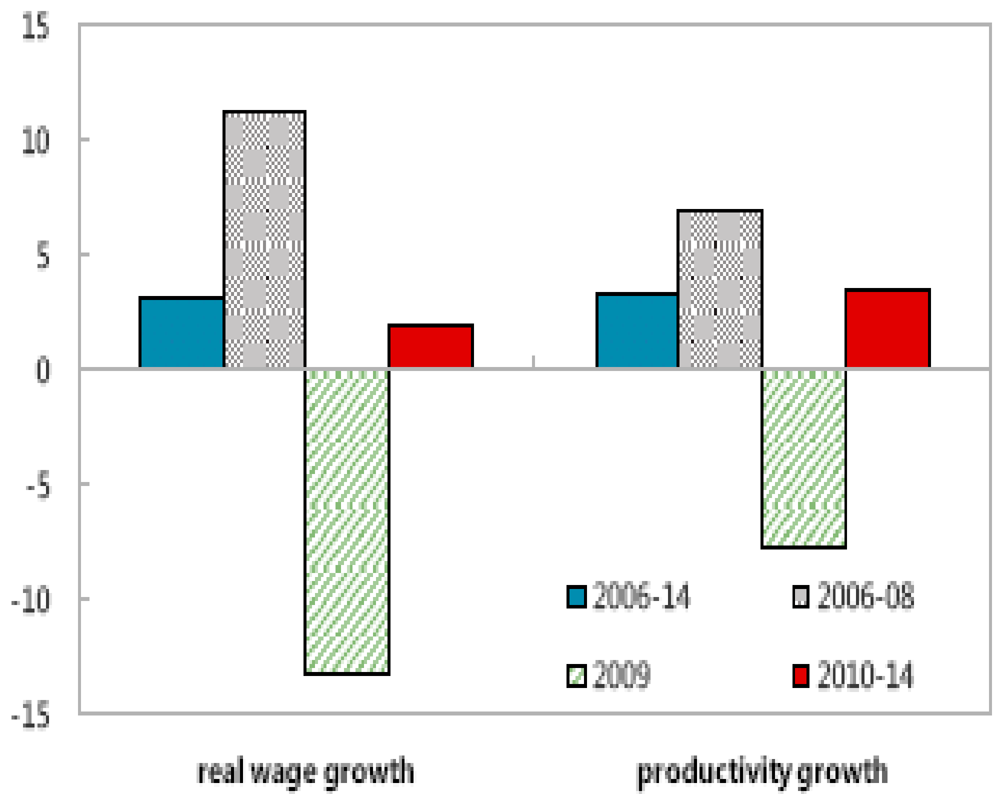
Production function	$Y = AL$
Productivity	$\frac{Y}{L} = A$
Wage share in nominal GDP	$\omega = \frac{WL}{PY} = \frac{W/P}{Y/L}$
Unit labor costs	$ulc = \frac{WL}{Y} = \frac{WL}{AL} = \frac{W}{A}$
Mark-up pricing	$P = (1+\mu)ulc$

Lithuania: productivity and wages (IMF-LT Article IV, 2015)



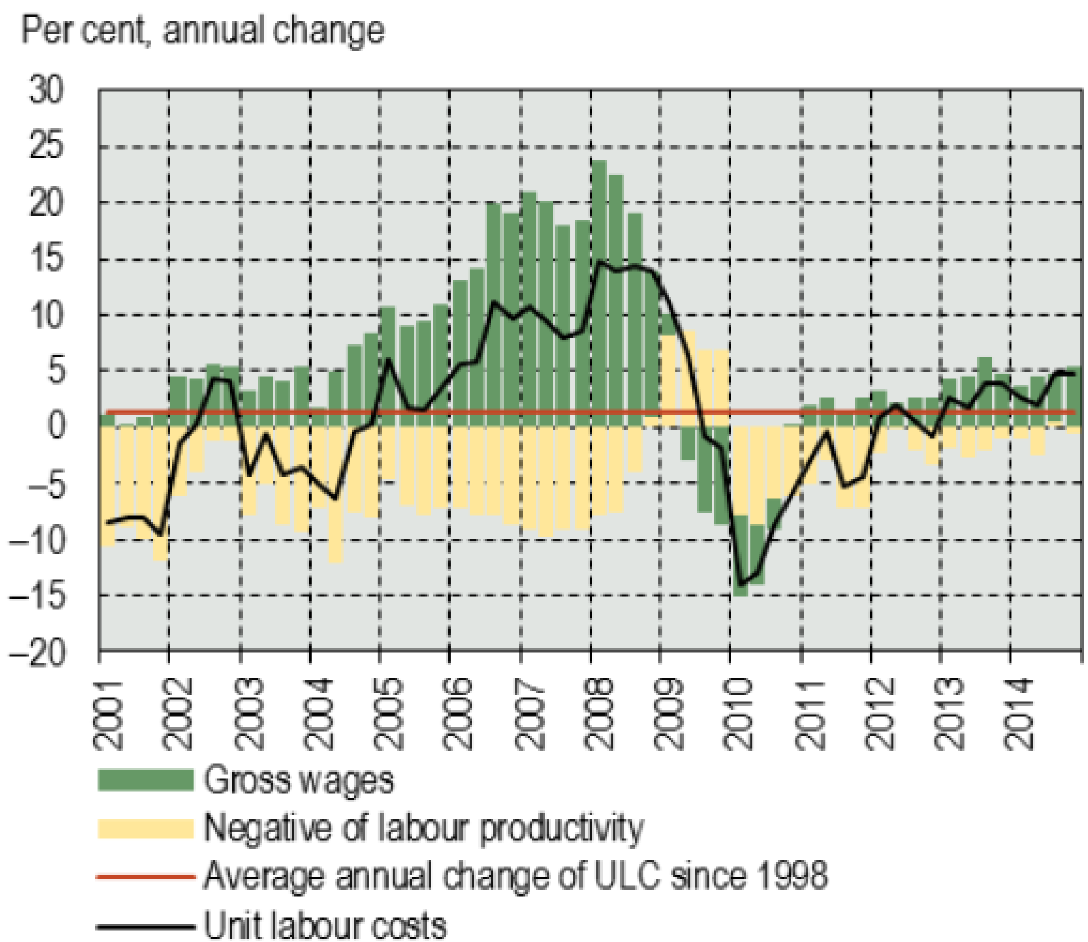
Lithuania: productivity and wages (IMF-LT Article IV, 2015)

Figure 4. Productivity and Wage Growth
(In percent, annualized)



Sources: Haver and IMF staff calculations.

Lithuania: unit labor costs = wage growth – productivity growth



Sources: Statistics Lithuania and Bank of Lithuania calculations.

Lavoie, M. and E. **Stockhammer**, 2014, *Wage-led Growth: An equitable strategy for economic recovery*, (ILO)

Table 1.1 Pro-labour and pro-capital distributional policies

	Distributional policies		
	Pro-capital	Pro-labour	Other factors
Policies	'Labour market flexibility' Abolish minimum wages Weaken collective bargaining Impose wage moderation	'Welfare state' Increase minimum wages Strengthen collective bargaining	Changes in technology Globalization Financialization
Results	Weak wage growth Wage share ↓ Increased wage dispersion	Rising real wages Stable (or ↑) wage share Decreased wage dispersion	

Lavoie, M. and E. **Stockhammer**, 2014 (2)

Table 1.2 Definition of profit-led and wage-led regimes

		Overall impact on the economy	
		Expansionary	Contractionary
Income distribution change imposed on society	An increase in the profit share	Profit-led regime	Wage-led regime
	An increase in the wage share	Wage-led regime	Profit-led regime

Lavoie, M. and E. **Stockhammer**, 2014 (3)

Table 1.9 Summary of the results of Onaran and Galanis (2013): effects of a national and global one percentage point increase in the profit share

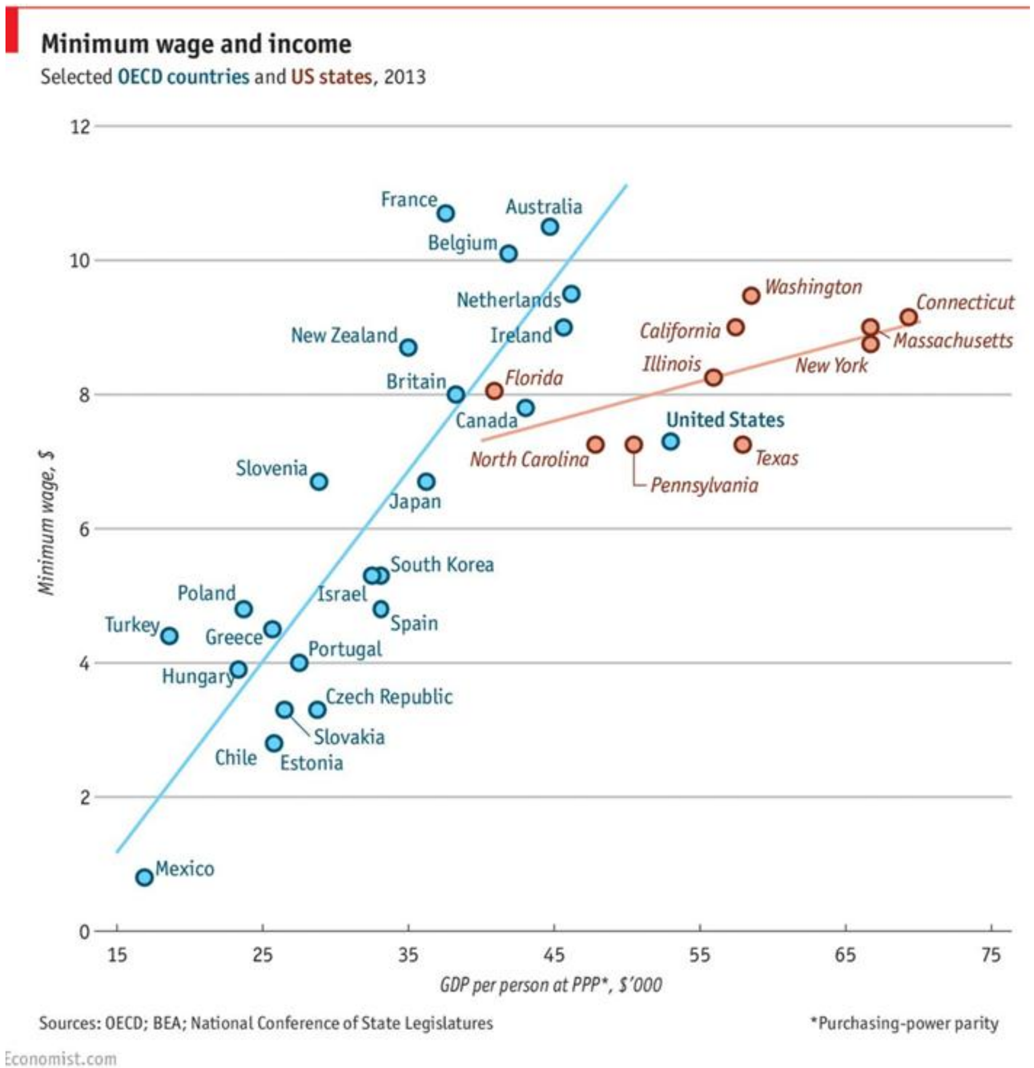
	Effects of national increase in profit share on:					Effect of worldwide increase in profit share on aggregate demand
	C/Y	I/Y	NX/Y	private excess demand/Y	aggregate demand	
	A	B	C	D (A+B+C)	E	G
Euro area-12	−0.439	0.299	0.057	−0.084	−0.133	−0.245
Germany	−0.501	0.376	0.096	−0.029	−0.031	–
France	−0.305	0.088	0.198	−0.020	−0.027	–
Italy	−0.356	0.130	0.126	−0.100	−0.173	–
United Kingdom	−0.303	0.120	0.158	−0.025	−0.030	−0.214
United States	−0.426	0.000	0.037	−0.388	−0.808	−0.921
Japan	−0.353	0.284	0.055	−0.014	−0.034	−0.179
Canada	−0.326	0.182	0.266	0.122	0.148	−0.269
Australia	−0.256	0.174	0.272	0.190	0.268	0.172
Turkey	−0.491	0.000	0.283	−0.208	−0.459	−0.717
Mexico	−0.438	0.153	0.381	0.096	0.106	−0.111
Korea, Rep. of	−0.422	0.000	0.359	−0.063	−0.115	−0.864
Argentina	−0.153	0.015	0.192	0.054	0.075	−0.103
China	−0.412	0.000	1.986	1.574	1.932	1.115
India	−0.291	0.000	0.310	0.018	0.040	−0.027
South Africa	−0.145	0.129	0.506	0.490	0.729	0.390

Note: The global simulation excludes Germany, France and Italy since they are part of the euro zone.

Source: Onaran and Galanis (2013, Table 2).
'Effect of worldwide change in profit share on aggregate demand': effect of a simultaneous change in the profit share in all countries, including domestic multiplier effects and international trade effects

III. Labor market institutions

The role of labor market institutions: minimum wage



Incomes policy

- "In addition, central banks, in their pursuit of consumer price stability, could reconsider the place of the long-forgotten **incomes policy** in the overall policy mix. Since **excessive inflation or deflation is frequently the outcome of the *conflict* between labor and capital**, it should be dealt with using the **instrument which *directly* moderates the conflicting claims** on income.
- This approach would also take some **pressure off the monetary policy** or help in the environment of **lowflation/deflation**. For example, recently **Bundesbank** welcomed **above-inflation wage increases in some sectors** in Germany, despite the fact that BuBa historically has been a strong **advocate of wage restraint** (http://uk.reuters.com/article/2014/07/30/uk-germany-wages-weidmann-idUKKBN0FZ03U20140730)"

From: Kuodis, R. (2014), **"Policy Trade-offs (In CESEE and Elsewhere)"** (Conference on European Economic Integration (CEEI 2014) *The Rebalancing Challenge in Europe – Perspectives for CESEE,* Oesterreichische Nationalbank).

IV. The future: Lithuania

Lithuania: a dichotomized economy?

- **Rural area/small towns** (a <u>vicious</u> cycle):
  - **internal/external emigration and aging** kills demand
  - firms/households reluctant to invest
  - **infrastructure: diseconomy of scale →** utilities: prices up
- **Large cities** (a <u>virtuous</u> cycle):
  - **internal emigration** to Vilnius
  - the urban economies are **booming (Vilnius region = 38% of GDP)**
  - **investments** are concentrated in Vilnius (or Kaunas, Klaipėda...), **despite higher costs**

V. Demand, hysteresis and the long run:

policy implications;

policy complacency (in the EZ)

From cyclical to structural (via hysteresis)

- The following slides are based on: http://bilbo.economicoutlook.net/blog/?p=30947

From cyclical to structural: mainstream

- **Mainstream** economics:
  - **structural imbalances in the labor market arise independently of the economic cycle** and hence, aggregate spending;
  - therefore government **policy could do little to bring unemployment down** when mass unemployment was largely **‘structural’ in nature**;
  - instead, **“supply-side remedies” were necessary**, which include **labor market deregulation** (abandoning employment protection etc.), minimum wage and **income support cuts**, and eroding the influence of **trade unions**.

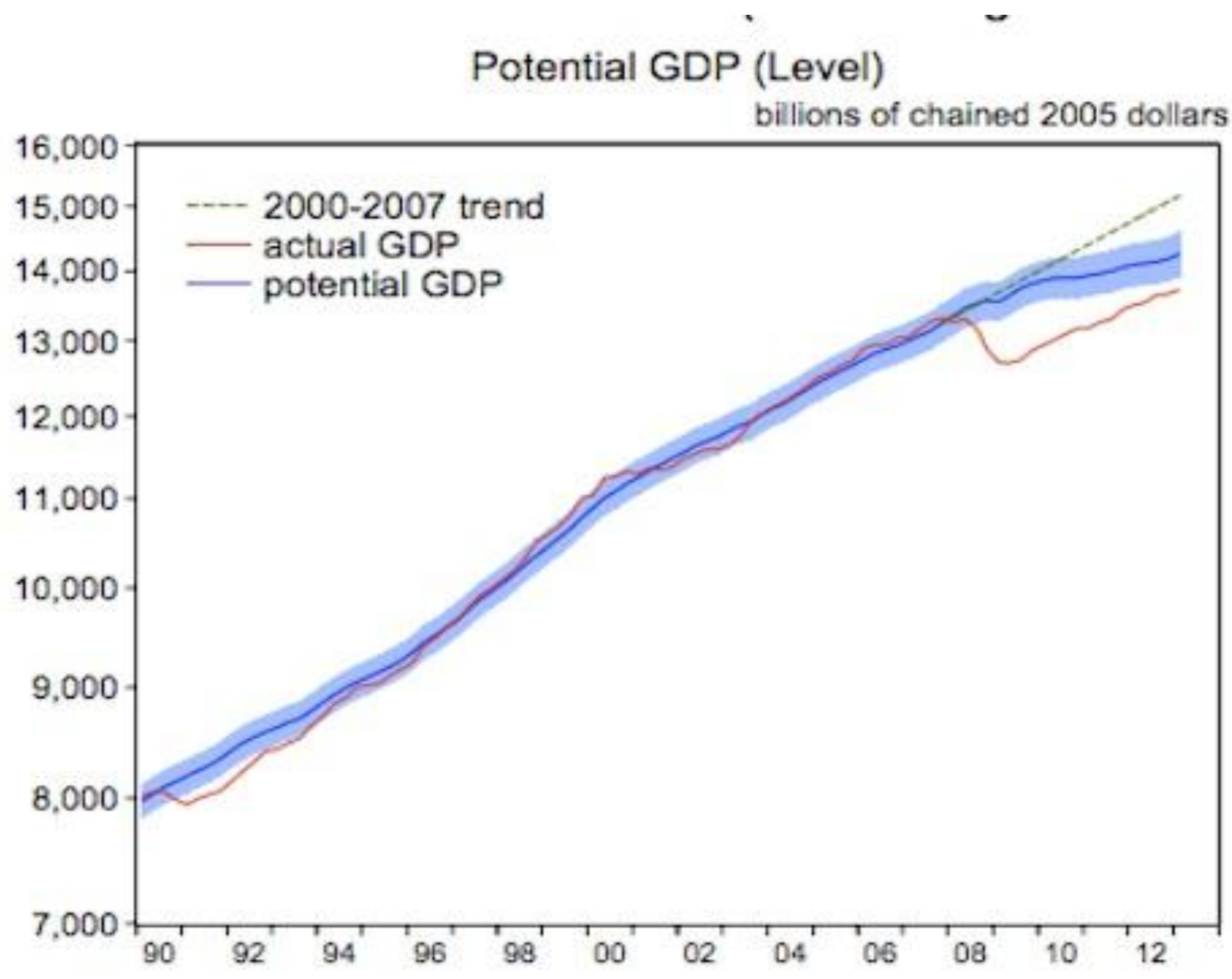
From cyclical to structural: unorthodox

- **Unorthodox** economics:
  - **structural imbalances are highly sensitive to the economic cycle** – the supply-side of the economy is not independent of the demand-side and that **supply imbalances** (for example, skill mismatches) rather **quickly disappear when the economy operates at higher pressure**.

From cyclical to structural: policy

- In other words, government **fiscal policy:**
  - **is an effective way of not only reducing unemployment** but, in doing so,
  - it **increases the effectiveness of the labor force** (via **skill upgrading**, **higher participation** rates etc.) – that is, it cleared away the so-called structural imbalances.
- A recent paper from researchers at the Federal Reserve Board – Aggregate Supply in the United States: Recent Developments and Implications for the Conduct of Monetary Policy – finds new US evidence to support the supply-dependence on demand conditions.

From cyclical to structural: the U.S.



From cyclical to structural: “potential” GDP

- The **concept of a potential GDP** in the CBO parlance:
  - is **not to be taken as a fully employed economy**;
  - rather they use the **standard dodge employed by mainstream** economists where the concept of full employment is not constructed as the number of jobs (and working hours) which satisfy the preferences of the available labor force, but rather in terms of the **unobservable Non-Accelerating-Inflation-Rate-of-Unemployment (NAIRU)**.

From cyclical to structural: policy complacency

- The problem is that:
  - **<u>policy makers then constrain their economies to achieve this (assumed) cyclically invariant benchmark</u>;**
  - yet, despite its centrality to policy, the **NAIRU evades accurate estimation** and the **case for its uniqueness and cyclical invariance is weak;**
  - given these vagaries, its **use as a policy tool is highly contentious**.

From cyclical to structural: labor market damage

- They identify “3 potential sources of labor market damage”:
  - **difficulties in reallocating labor across different segments** of the economy (**industry, occupation, or geographic**) associated with the **distribution of the demand shock** caused by the financial crisis and deep recession;
  - a more general **deterioration in the efficiency of the matching process** between available workers and available jobs;
  - **long-term damage in labor markets** (often referred to as **hysteresis**) associated with the substantial rise in the **number of long-term unemployed** and a possible reduction in the **employability** of affected workers.

From cyclical to structural: Beveridge curve

- The research is indicating that these typical **"structural" characteristics are being driven by the aggregate economic spending cycle**, rather than **non-cyclical impediments**, which are usually identified by **mainstream economists as the source**.
- The authors also recognize that the **relationship between unemployment and vacancies has shifted outwards in the US during the recession**, which would typically lead mainstream economists to conclude that "structural unemployment" has increased.
- However, they note that it is important to note that the **Beveridge curve can shift for a variety of reasons**, some of which are cyclical rather than structural in nature.

From cyclical to structural: Beveridge curve

- In summary, the UV (or **Beveridge**) curve shows the **unemployment-vacancy (UV) relationship**, which plots the unemployment rate on the horizontal axis and the vacancy rate on the vertical axis to investigate these sorts of questions. It is a **downward sloping** relationship.
- The logic is that:
  - **movements along the curve are cyclical events;**
  - **shifts** in the curve are alleged to be **structural** events.
- The **mainstream** literature claims that **"shifts in the curve"** (out or in) indicate **non-cyclical (structural) factors** largely due to the labor market becoming **less efficient in matching** labor supply and labor demand and vice versa for shifts inwards.

From cyclical to structural: neoliberal targets and "structural reforms"

- The **factors that allegedly "cause" increasing inefficiency** are the usual **neo-liberal targets:**
  - the provision of **income assistance** to the unemployed (dole);
  - other welfare payments, **trade unions**, **minimum wages**, changing preferences of the workers (**poor attitudes to work**, laziness, **preference for leisure**, etc.).
- The problem is that this view is **at odds with the evidence:**
  - as is the case in most advanced countries, the **shift in the curve occurred during a major demand-side recession** – that is, it has been driven by cyclical downturns (macroeconomic events) rather than any autonomous supply-side shifts.

From cyclical to structural: neoliberals at odds with evidence

- This is **what the FRB paper finds**. Their explanation is that:
  - the provision of unemployment benefits increases the attractiveness of leisure when there are no jobs, which pushes out unemployment for each recorded vacancy;
  - the **upturn in economic activity and the retrenchment of extended unemployment benefits leads workers to offer more hours** of work than before at the same real wage and vacancy levels. Apparently, they **get sick of leisure** and gain a renewed appetite for earned income. As a result the UV curve shifts back in.
- This suggests that the **quit rate should fall as employment falls**. The **evidence is overwhelming**. When the unemployment rate rises, the quit rate falls. Exactly the **<u>opposite to that predicted by the supply-side story</u>** which means that their claim that **causality runs from unemployment benefits to higher quits to higher unemployment** is unsupported.

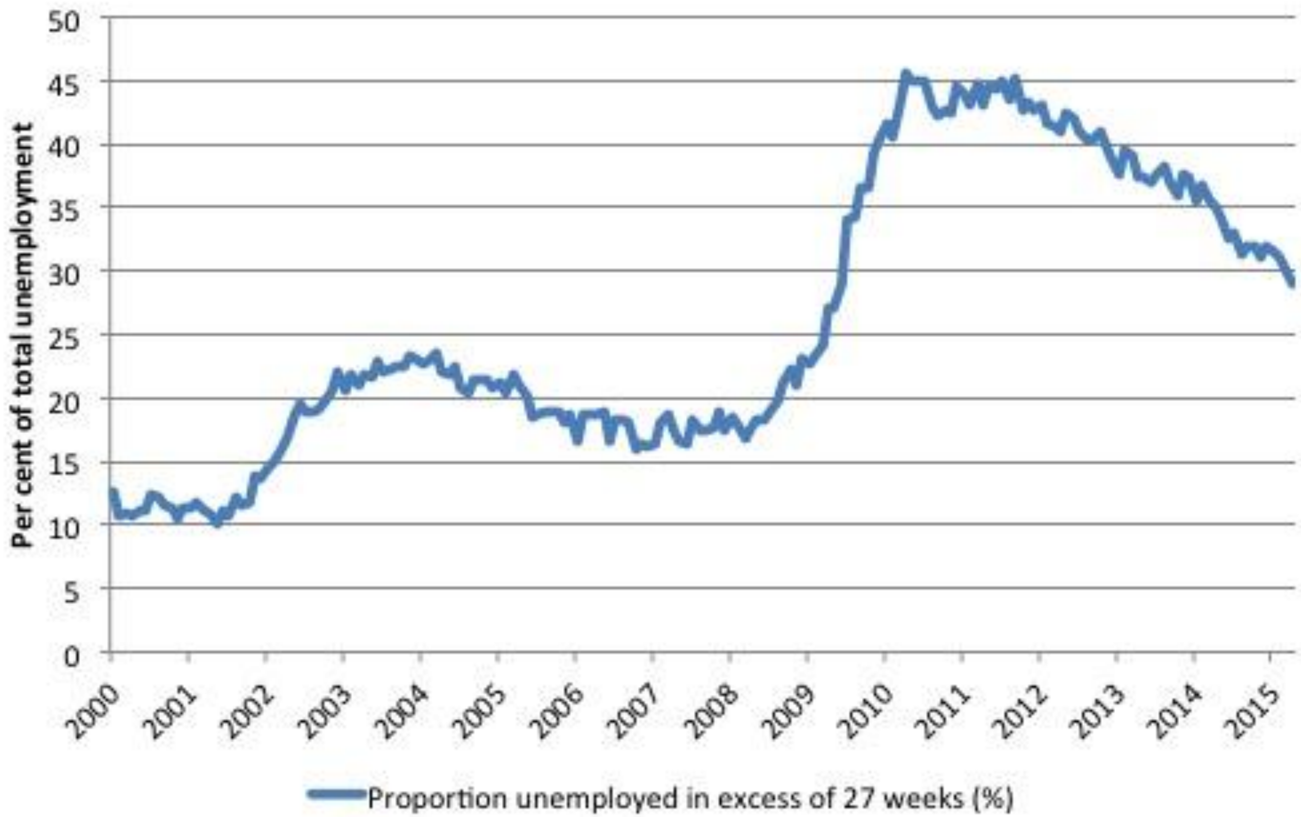
From cyclical to structural: shifts in UV curve are cyclical

- But the shared understanding between the FRB authors and a reasonable interpretation of what is going on is that the so-called **structural imbalances embodied in the shift in the UV curve** are **cyclical** in nature and will be **reversed** as a result of stronger economic activity **rather than attempting to address them with microeconomic policy changes** like reducing income support for the unemployed, **attacking wage levels** etc.

From cyclical to structural: long-term unemployment

- The FRB authors also address the **issue of long-term unemployment**, which has risen dramatically in the US since the onset of recession. It should be noted that the US Bureau of Labor Statistics' definition of – long-term unemployment "refers to individuals who have been looking for work for 27 weeks or more." In many other nations, long-term unemployment relates to spells of unemployment exceeding 52 weeks.
- The following graph shows the evolution of long-term unemployment as a proportion of total unemployment in the US from January 2000 to April 2015. It is clear that **as economic growth resumed, the proportion of long-term unemployed has fallen** dramatically.

From cyclical to structural: long-term unemployment



From cyclical to structural: long-term unemployment

- What does this mean? The FRB authors state that:
  - **long-term unemployment is of particular concern** because individuals out of work for extended periods of time may find that their **skills, reputations, and networks deteriorate**, resulting in a persistently higher level of structural unemployment or a steeper downtrend in the labor force participation rate.

From cyclical to structural: hysteresis

- At this stage, they introduce the notion of **"hysteresis"**. The **mainstream** economics literature (text books, most of the **New Keynesian models** etc.), which dominates the academy and the policy makers, considers the **supply-side of the economy to be independent of the demand-side**. The main models used in **textbooks and policy advice**:
  - continue to cast the supply-side of the economy as **following a long-run trajectory which is independent of where the economy is at any point** in time in terms of actual demand and activity;
  - that means, that the path the economy takes is ultimately dependent on the growth in capital stock and population and the **spending side** of the economy will typically **adjust through <u>price flexibility</u>**. In other words, it doesn't really matter if spending falls below the level required to fully engage the productive capacity of the economy at some point in time;
  - there will be **temporary deviations from the potential growth path** but soon enough, **market adjustments** (price and income shifts) **will restore the level of spending** (for example, **prices fall and consumers spend more**, which, in turn, stimulates more private investment spending etc.). But the supply-side momentum continues – and that defines the growth path of the economy.

From cyclical to structural: wage cuts

- A **classic** application of the **separation of the supply and demand** sides in mainstream economics is the claim that a **wage cut will increase employment**. They only consider wages to be a **cost** and so claim that if workers in a firm offer themselves at lower wages, **unit costs will fall** and **firms can expand their sales by lowering prices accordingly**.
- That **might happen at a firm-level** because the **drop in income from the wage cut is unlikely to have much effect on the sales levels of the firm in question**. If true, then the supply side (the supply of labor and its cost) will be largely independent of the demand-side (total sales volume).
- Even if true at that micro level, the problem is that **at the macroeconomic level wages are not only a cost of production** but they are also a **major component of total income**. If all wages are cut, national income will fall because workers will have less purchasing power and the sales of all firms will decline. As a result, the demand and supply sides of the economy are interdependent. The FRB authors find that interdependence is strong in the US economy.

From cyclical to structural: “structural” imbalances

- **Hysteresis** is a term drawn from physics. In economics, we sometimes say that where we are today is a reflection of where we have been. That is, the present is **path-dependent**.
- Many perceived “structural imbalances” are, in fact, of a cyclical nature. Accordingly, a **prolonged recession may create conditions in the labor market which <u>mimic structural imbalance</u>** but which can be **redressed through aggregate policy without fuelling inflation**. Any structural constraints that emerge during a large recession (for example, **skill mismatches**) can be **wound back by strong fiscal policy stimulation**.
- For example, recessions cause unemployment to rise and due to their prolonged nature the short-term joblessness becomes entrenched long-term unemployment. The **<u>unemployment rate behaves asymmetrically</u>** with respect to the business cycle which means that it **jumps up quickly** but takes a **long time to fall again**.

From cyclical to structural: unemployed queue

- There is **robust evidence** pointing to the conclusion that a **worker's chance of finding a job diminishes with the length of their spell of unemployment**. When there is a deficiency of aggregate demand, **employers use a range of screening devices** when they are hiring. These screening mechanisms effectively **"shuffle" the unemployed queue**.
- Among other things, **firms increase hiring standards** (for example, demand higher qualifications than are necessary) and may engage in **petty prejudice**.
- A common screen is called **statistical discrimination** whereby the firms will conclude, for example, that because, on average, a particular demographic cohort has higher absentee rates (for example), **every person from that group must therefore share those negative characteristics**. Personal characteristics such as gender, age, race and other forms of discrimination are used to **shuffle the disadvantaged workers from the top of the queue**.

From cyclical to structural: skills

- In a recession, **many firms disappear**, particularly those who were using **very dated capital equipment** that was less productive and hence subject to higher unit costs than the best practice technology. The **skills associated with using that equipment become obsolete** as it is scrapped. This phenomenon is referred to as **skill atrophy**:
  - skill atrophy relates not only to the specific skills needed to operate a piece of equipment or participate in a firm-specific process. Long-term unemployment also erodes **more general skills** as the **psychological damage** of unemployment impacts on a **worker's confidence** and bearing;
  - a lot of information about the labor market is gleaned informally via **social networks** and there is strong evidence pointing to the fact that as the **duration of unemployment becomes longer the breadth and quality of an unemployed worker's social network falls;**
  - further, as **training opportunities are typically provided with entry-level jobs** it follows that the **(average) skill of the labor force declines as vacancies fall;**
  - new entrants to the labor force – into the unemployment pool because of a lack of jobs – are denied relevant skills (and socialization associated with stable work patterns).

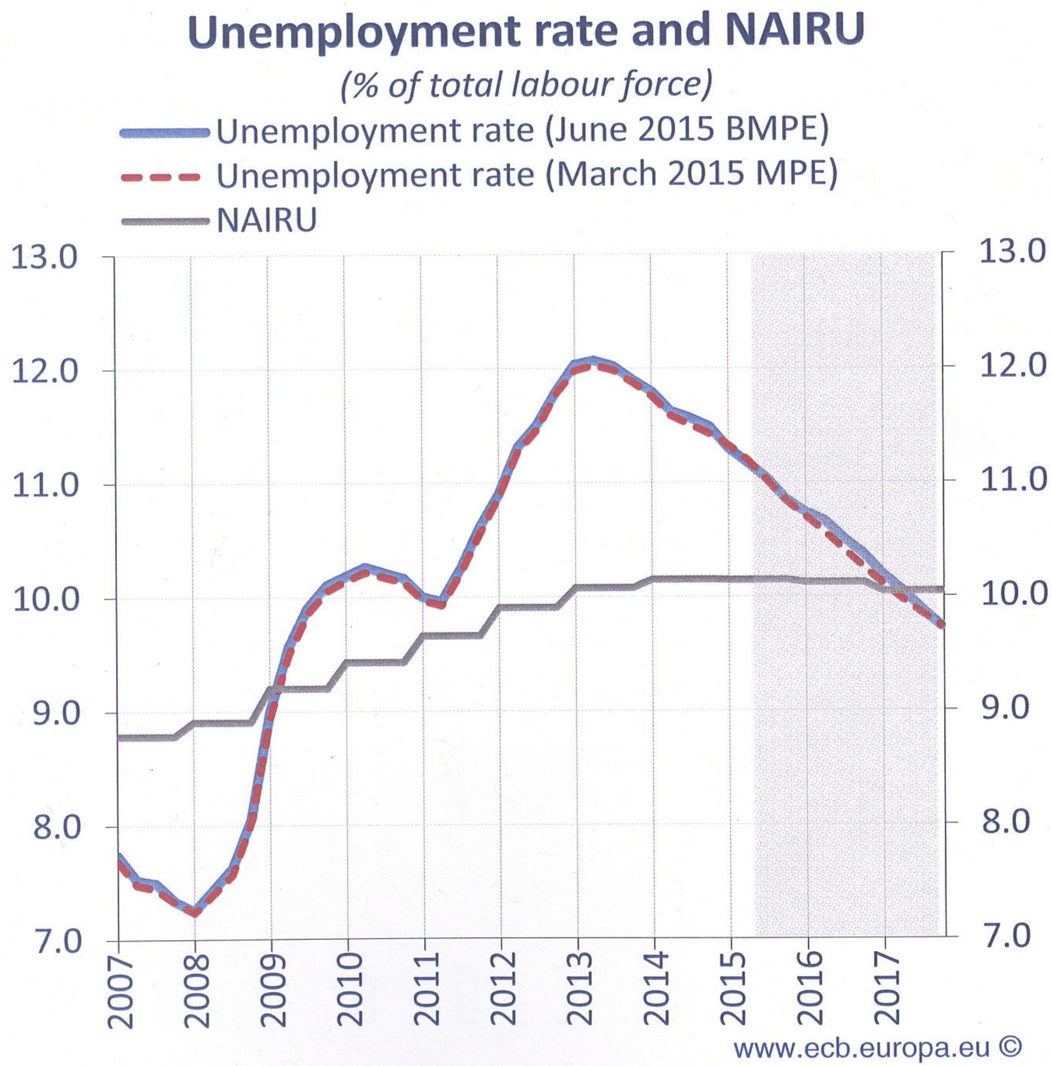
From cyclical to structural: long run is not independent

- As a result, both groups of workers – those made redundant and the new entrants – need to find jobs in order to update and/or acquire relevant skills. Therefore, **workers enduring shorter spells** of unemployment, other things equal, will tend to be **more to the front of the queue**. Firms form the view that those who are **enduring long-term unemployed are likely to be less skilled** than those who have just lost their jobs and with so many workers to choose from firms are reluctant to offer any training.
- However, just as the downturn generate these skill losses, a **growing economy will start to provide training opportunities as the unemployment queue diminishes**. This is one of the reasons that economists believe it is important for the government to **stimulate economic growth** when a recession is looming to ensure that the **skill transitions can occur more easily**.
- The <u>**long-run is thus never independent of the state of aggregate demand in the short-run**</u>. There is <u>**no invariant long-run state that is purely supply determined**</u>. By stimulating output growth now, governments also help **relieve longer-term constraints on growth** – **investment is encouraged** and **workers become more mobile**.

From cyclical to structural: “output gap” closes at high unemployment

- Hysteresis means that the longer a recession (that is, the output gap) persists the broader the negative hysteretic forces become. At some point, the **productive capacity of the economy starts to fall (supply-side) towards the sluggish demand-side** of the economy and the **<u>output gap closes at much lower levels of economic activity</u>**.

From cyclical to structural: Eurozone



From cyclical to structural: aggregate demand failure

- When there is an **aggregate demand failure**, the **output gap opens up quickly** as real GDP departs from the (extrapolated) potential real GDP line. Any **persistence of the output gap** starts to **undermine investment plans** as **firms become pessimistic** about the future state of aggregate demand.
- At some point, **investment starts to decline** and two things are observed:
  - the **recovery in real output does not accelerate** due to the constrained private demand;
  - the supply-side of the economy **(potential) starts to respond** (that is, is influenced) by the path of aggregate demand takes over time.
- The **entrenched recession** is thus not only caused **major national income losses** while the output gap was open but is also made that the **growth in national income** possible in this economy is **much lower** and the **nation, in material terms, is poorer as a consequence**.

From cyclical to structural: costs of recessions

- Moreover, the **inflation barrier** (that is, the point at which nominal aggregate demand is greater than the real capacity of the economy to absorb it) **occurs at lower actual real output levels**.
- The <u>**estimated costs of the recession and fiscal austerity are much larger than the mainstream will ever admit**</u>. Those **who advocate austerity** and the massive short-term costs that accompany it **fail to acknowledge these inter-temporal costs**.
- **What does the FRB paper believe all this means?** They state that while:
  - … major financial crises tend to reduce a nation's productive potential … what is commonly presumed because **much of the supply-side damage could be an endogenous response to weak aggregate demand.**

From cyclical to structural: sovereign governments should act

- What the hysteresis literature – both theoretical and applied – teaches us is that governments should do everything within their capacity to avoid recessions:
  - not only does a strategy of **early policy intervention avoid massive short-run income losses** and the sharp rise in unemployment that accompany recession,
  - but the **longer term damage to the supply capacity** of the economy and the **deterioration in the quality of the labor force** can also be **avoided**.
- A national, **currency-issuing government can always provide sufficient aggregate spending** in a relatively short period of time **to offset a collapse in non-government spending**, which, if otherwise ignored, would lead to these damaging short-run and long-run consequences.
- The **"waiting for the market to work" approach is vastly inferior** and not only **ruins the lives** of individuals who are forced to disproportionately endure the costs of the economic downturn, but, also **undermines future prosperity** for their children and later generations.

The End