

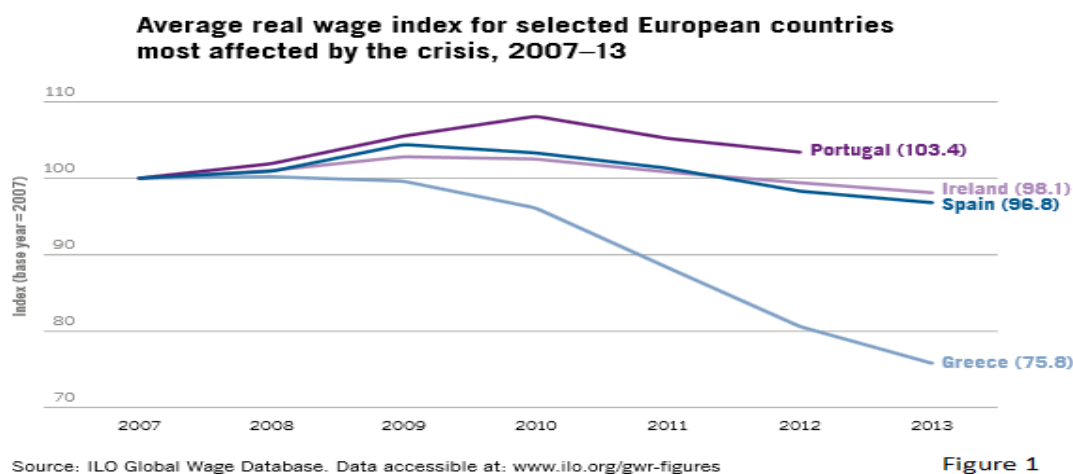
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The neo-classical and Kaleckian theories of employment and income distribution and their economic policies

1- Introduction

Unemployment is one of the most serious issues the world's economy is grappling with. In the European Union, it increased sharply in the aftermath of the *Great Recession* to nearly 11 percent (Ameco data base, 2015). Even though it seems that the economy recovery gains momentum, in nations such as Spain and Greece, unemployment currently stands well above 20 percent (Ameco data base, 2015). High levels of unemployment are also causing a shift in income distribution in detriment of wage earners, who have seen their real wage shrinking almost continuously since the onset of the financial crisis. In its global wage report for 2015, the ILO (international labour organisation) produces the following graph:



Different theories are put forward to explain the unemployment problem. In this paper I will briefly mention neoclassical and Kaleckian views on unemployment and income distribution and how the policies drawn from these stances contrast significantly.

This paper contains 3 sections. The first one explains how neoclassical thought deals with unemployment and the policies drawn from it in a closed and open economy. The second one explains the Kaleckian argument and its policies as described for the previous section. The third section concludes this paper contrasting the main ideas drawn from the policies.

2- The Neoclassical thought

2.1 The argument

In the classical setting, firms operate in a perfect competitive market and they choose to maximize output until the marginal cost equals marginal revenue (Froyen, 2011). Given that labour is the only cost and that the law of diminishing return apply, they will continue hiring workers until their wages equal what firms earn by selling their output (Froyen).

Thus, we obtained the following curve relating unemployment and the wage level (Gottfries, 2013)

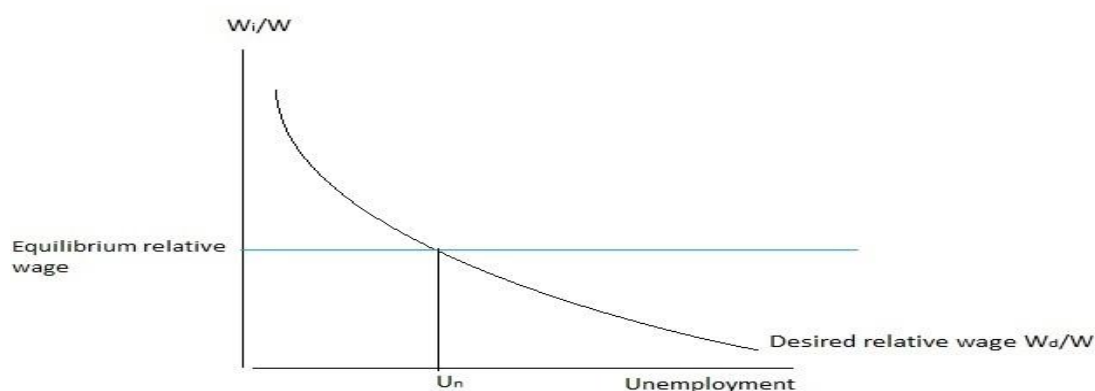


Figure 2

Gottfries (2013) shows that the wage rate is a function of the unemployment rate. As unemployment rises above U^n , there are more workers on the supply side, so firms are more inclined to lower wages. However, as unemployment is below U^n , wages starts to increase because the available labour force diminishes and companies have to offer higher wages to attract potential employees and keep them in the company.

The only level of unemployment at which all firms are content with their relative wage is given by U^n . This is called the *natural rate of unemployment*, and no firm has reason to either decrease or increase wages relative to other firms (Gottfries, 2013).

The wage setting is given by the following equation (Gottfries, 2013):

$$W = W - b (U - U^n) W$$

This equation intuitively demonstrates that if $U > U^n$, the level of unemployment stands above the natural level and wages will tend to decline. On the other hand, if $U < U^n$, unemployment is below the natural level and wages will tend to go up.

On the supply side, workers try to maximize their utility in a trade-off between leisure and work. As Froyen puts it (2013, p57): “The higher the real wage, the higher the satisfaction [...]”. Thus the curve is upward sloping.

Plotting both curves together:

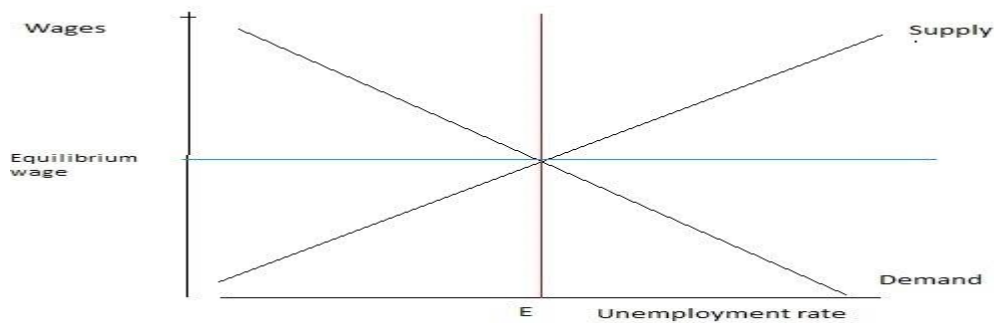


Figure 3

Concerning income distribution in this setting, it equals the level of production, which is given by the following equation (Gottfries, 2013)

$$Y^n = F(K, E (1 - U^n) L)$$

Where the level of production is a function of a given capital stock (K), a given technology (E), and the labour force (L) which is determined by the natural level of unemployment ($1 - u_n$). As every factor apart from the labour force is given, the *natural level of production* fluctuates as the *natural level of unemployment* moves up and down.

Since workers are paid their Marginal product (MPL), the real wage is given by this equation (Gottfries):

$$\frac{W}{P} = \frac{MPL}{1 + \mu}$$

Where μ is the mark-up.

If there is perfect competition in the market and workers are paid their marginal product, $\mu = 0$ and wages will tend to increase. Whereas, if there is a strong monopoly competition, $\mu > 0$ and the real wage will tend to decrease.

Gottfries (2013) depicts the following graph:

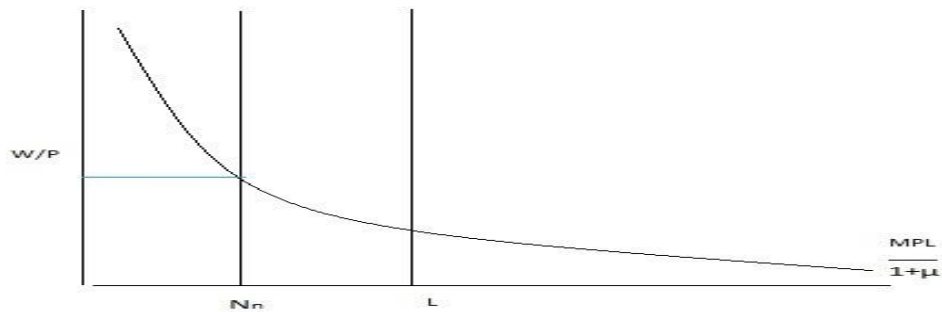


Figure 4

As it can be presumed from the graph, an increase in the labour force or a level of unemployment above the natural level reduces real wages. Monopolist competition and the consequent increase in μ also reduces wages.

In order to obtain how income is distributed, Gottfries (2013) uses the following equation which gives us the labour share in national income.

$$\frac{WN}{PY} = \frac{1 - \alpha}{1 + \mu}$$

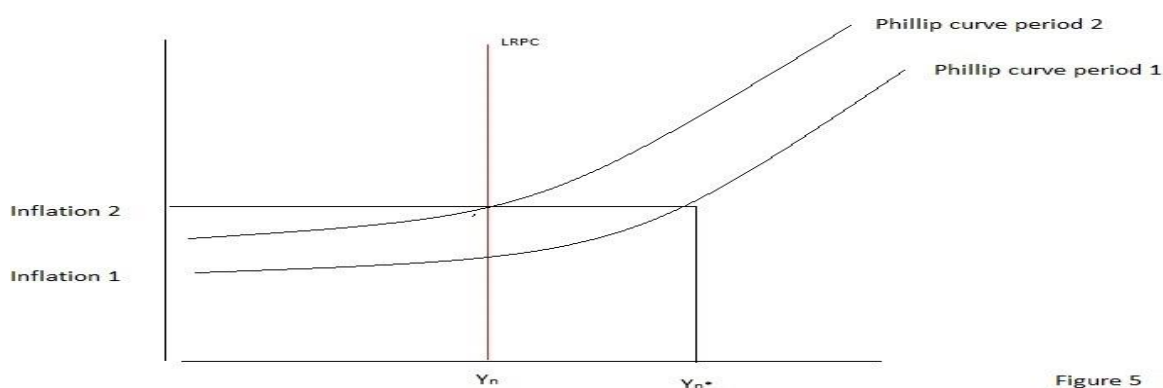
Where α measures the significance of capital in the production process.

2.2 Policies

2.2.1 Closed economy

The Neoclassical argument advocates for a reduction in the natural rate of unemployment. It neglects the use of expansionary fiscal policies because they just have a short time effect on unemployment levels at the cost of rising inflation.

Gottfries (2013) uses the following graph to illustrate this effect



An increase in the natural level of production, which assumes an unemployment level below the natural level, causes inflation to rise as long as the expansionary fiscal policy is in place. Giving that an out of control inflation is not desirable, once the expansionary policy is removed, production and employment would be brought back to the natural level, but inflation would continue to be high. So in the long run, expansionary policies have no effect whatsoever.

As several authors put it, state benefits, and unions are the main source of the rise of the natural level of unemployment.

Nickell (1998) and Blanchard and Wolfers (1999) mainly blame labour market institutions (LMIs) for the rise in the natural level of unemployment. The authors create an econometric model to prove that the duration of unemployment benefits, the strength of unions, and the coverage of workers by the agreements reached by unions and the interaction of these factors with economic shocks, such as an increase in commodity prices, increase the natural level of unemployment.

These policies have been put into practice in a set of countries since the financial crisis broke out, mainly in Europe. According to the ECB (2012) unions' coverage has been restrained in Greece. In Portugal redundancy payments have been reduced along with a reduction in unemployment benefits. In Spain unemployment compensations have also been curtailed along with the greatest labour market overhaul in the last 20 years, giving more flexibility to businesses to set wages and to hire and fire staff.

These policies unlock part of the labour force that otherwise would stay idle due to the generosity of governments. They are programmes to 'motivate' people to look for work actively.

On the side of the market structure government regulation is needed in order to guarantee a high real wage. The goal of this interventionism in the market is to assure perfect competition. Thus, the mark-up (μ) could be as close to 0 as possible.

$$\frac{WN}{PY} = \frac{1 - \alpha}{1 + \mu}$$

The smaller is μ , the smaller is the denominator and higher is the real wage. This could enhance business to invest more in human capital and new procedures to gain in efficiency what they cannot gain through high mark-ups. A well trained labour force may well also be a justification to increase real wages.

2.2.2 Open economy

In an open economy with foreign competition Krugman (1994) says minimal wage laws make unskilled labour relatively more expensive. Assuming that businesses face competition from other countries, the cheaper your labour force, the cheaper your products or services. In other words, wage restraint, other things being equal, boost exports and competitiveness. According to him minimal wages should be curtailed, giving more flexibility to companies to set wages in the international market. In Greece, where productivity growth has been close to 0 in 2010 and negative since 2011, minimal wage has been reduced to boost exports (OECD data base, 2015; ECB, 2012)

Given the change that is taking place in the labour market, where high-skilled workers are increasingly demanded, investing in human capital is another option to bring down the natural level of unemployment in the long run, making the labour force more employable (Krugman, 1994). The mismatch between the skills demanded by businesses and those provided by workers is highlighted as another cause hindering jobs' creation (ECB, 2012).

Additionally, excessive market regulations and *red* tape also increase the cost of hiring new staff. Therefore a deregulated labour market is desirable to attract foreign investment in an increasingly competitive market. Yet this could increase monopolistic competition and as it was seen in figure 4, real wages would suffer.

3-The Kaleckian thought

3.1 The argument

This section presents a completely different view on unemployment. In contrast to the neoclassical model, Kalecki makes equal supply and demand and he assures that everything that is produced is actually sold. He gives us the following equation (Lavoie, 2014)

$$wL + ap = pLy$$

Solving for real wages:

$$\left(\frac{w}{p}\right)^{\text{eff}} = y - a/L$$

He holds output per worker (Y) and autonomous expenditures (a) constant. Thus, a higher rate (w/p) requires a higher level of production that likewise involves a higher level of employment.

The downward sloping demand curve is reversed here and the following graph is obtained (Lavoie, 2014)

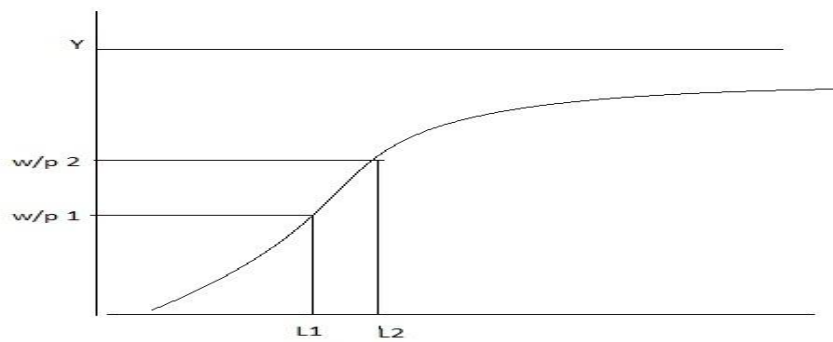


Figure 6

Along the curve, higher real wages causes the level of employment to go up and all production is sold. Obviously the limit of pay-rises is kept by the level of productivity given by Y. In order for the setting to hold, firms have to operate below full capacity (Lavoie, 2014).

Solving now to obtain the level of employment:

$$L = \frac{a}{sp(Y - \frac{W}{P})}$$

For a given autonomous expenditure, employment depends on income distribution which is given in the denominator. The denominator is also a function of the propensity to save out of profits.

3.2 Policies

3.2.1. Closed economy

In a closed economy the policies are clear. In order to create employment, demand has to be stimulated. Bhaduri and Marglin (1990) argue that investment and consumption are the main drivers thereof. So it follows that policies aiming at increasing real wages must be put into practice. In other words, the wedge between labour productivity and real wages has to narrow.

Stockhammer and Onaran (2011) argue that even though wages have fallen in real terms in Europe, contrary to the neoclassical thought, unemployment has remained high. Wage moderation in the case of Europe, they claim, has the opposite effect due to a decrease in

demand. Strengthening collective bargaining and minimal wage laws are in this case a must to guarantee a level of wages that can sustain a decent level of employment.

On the other hand, investment has to be also stimulated. Rowthorn (1995) advocates for an increase in capacity through low interest rates, favourable taxes and government deficits reduction in times of bonanza. He stresses that the problem of unemployment is a problem of underinvestment. Thus, a decent level of employment “[...] require[s] substantial investment both in fixed capital *and* in education and training” (Rowthorn, 1995, p.38).

Stockhammer and Klar (2010) also support an increase in capital stock and find very similar results to those obtained by Rowthorn. Especially low interest rates and capital accumulation show very remarkable T-values in their econometric model. They conclude that in order to solve the unemployment’s puzzle it is mandatory to take into consideration investment expenditures. They also argue that policies that aim solely at the labour market regulation will not amend the high levels of unemployment. Given that aggregate demand is the main trigger of investment, it follows that a policy of high real wages has to be observed.

3.2.2 Open economy

As it was mentioned before, in a closed economy there should be policies targeting an increase in real wages. Yet when we include the foreign sector, businesses’ profits are squeezed by a constant decrease in the mark-up to make their products more competitive and by an increase in domestic wages. Given an open international market where capital can move from country to country, firms would move to those places where profits can be realized and their profit share increased. Therefore a global agreement to increase wages would be needed in order to avoid capital flights, however this is unlikely to take place. Thus, in order to retain investment, realize profits and keep employment at decent levels, a government deficit is needed. Lavoie (2014) gives the following equation:

$$q = \frac{I + G}{sp\pi + T}$$

Government deficits (when $T < G$) assure that a level of production (q) and thus employment is maintained.

$$p = \frac{I+G}{sp+T/\pi}$$

When companies increase their mark-ups and profit shares (π) go up, a decrease in demand takes place and taxes shrink accordingly (Lavoie, 2014). As long as governments run a deficit ($T < G$) profits will increase and companies will stay in the country. This could assure investment and a decent level of employment.

In an open economy net exports have to be also included in the numerator. Positive net exports increase output and thus employment.

$$q = \frac{I+G+(X-M)}{sp\pi+T}$$

However, an increase in real wages might be detrimental for a country with high import elasticity. The positive effect caused by a rise in real wages in a closed economy could be exported to another country via greater level of imports in an open economy. Thus, higher real wages might not have any effect whatsoever domestically if the population tend to import when they have more money to spend. National firms could not therefore have any incentive to increase real wages due to the consumption patterns of the population.

International trade and competition among countries could also trigger a *race to the bottom* effect. In an attempt to boost exports, companies engage in policies to reduce the wage share. However, as Onaran (2015, pp. 1-2) puts it “[...] most of the positive effects on net exports are wiped out as labour costs fall simultaneously in all countries, and their international competitiveness relative to each other does not change significantly.”

4- Policies comparison

The most striking feature of the neoclassical setting is that “[...] the level of aggregate demand will have no effect on output [and thus unemployment]” (Froyen, 2011 p64). It also denies that government expenditures have an effect on unemployment and output whatsoever. As it was seen above, most of the policies aim at the supply side: wages flexibility, fewer benefits and limitations to the power of unions. These factors could therefore increase the labour supply and reduce the natural level of unemployment in the long run. All these policies have been put into practice across the Eurozone periphery for a long time, and the effect has been a decrease in the real wage and in the labour share of national income (International labour organisation, 2015)

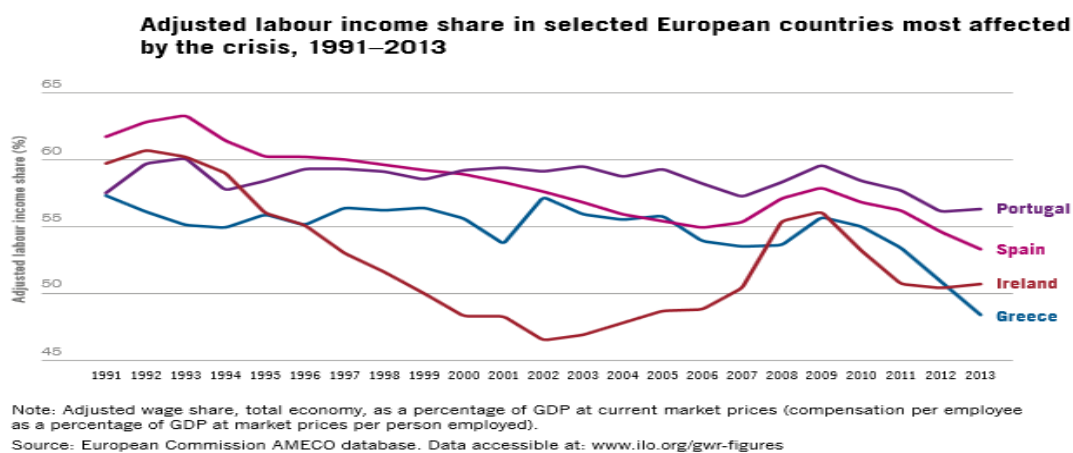


Figure 7

On the other hand, Kaleckian thought does acknowledge the demand effect on unemployment and output through higher real wages. The policies applied under this framework point to a better distribution of earnings through a higher labour share in national income because it is assumed that workers have a high propensity to consume out of wages compare to capitalists (Onaran, 2015). Kaleckian policies consider public investment as a promoter of output and employment and that even government expenditures could achieve full employment (Kalecki, 1943). However, Kalecki (1943) claims that political reasons and antagonism from businesses and banking leaders are the main obstacles to attain a society with no unemployment.

Number of words from the introduction (no counting references): 2487

5-References

AMECO database. Available at:

http://ec.europa.eu/economy_finance/ameco/user/serie/SelectSerie.cfm[Accessed 30/11/2015].

Bhaduri, A., Marglin, S. 1990. Unemployment and the real wage: The economic basis for contesting political ideologies. *Cambridge journal of economics*, 14, pp. 375-393.

Blanchard, O. Wolfers, J. 2000. The role of shocks and institutions in the rise of European unemployment: The aggregate evidence. *The economic journal*, 110 (March), C1-C33.

Davidson, P., 1998. Post Keynesian employment analysis and the macroeconomics of OECD unemployment. *The Economic Journal*, 108, pp. 817-831.

ECB, 2012. Euro area labour markets and the crisis. *Monthly bulletin*.

Froyen, R.T. 2013. *Macroeconomics: theory and policies*. 10th Ed. Kendallville: Courier

Gottfries, N. 2013. *Macroeconomics*. Basingstoke: Palgrave Macmillan.

International labour organisation, 2015. *Global wage report 2014/2015. Wages and income inequality*. [Online] Geneva: The International Labour Office. Available at: http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_324678.pdf [accessed 29/12/2015]

Kalecki, M. 1943. *Political aspects of full employment*. Available at: <http://mrzine.monthlyreview.org/2010/kalecki220510.html> [accessed 29/12/2015]

Krugman, Paul, 1994. Past and prospective causes of high unemployment. *Economic review by the Federal Reserve Bank of Kansas City*. Available at: <https://www.kansascityfed.org/PUBLICAT/SYMPOS/1994/s94krugm.pdf> [accessed 29/12/2015]

Lavoie, M. 2014. *Post-Keynesian economics: new foundations*. Cheltenham: Edward Elgar publishing limited.

Nickell, Stephen, 1998. Unemployment: Questions and some answers. *The economic journal*, 108, pp.802-816.

OECD database. Available at: <https://data.oecd.org/> [Accessed 5/12/2015]

Onaran, O. 2015. Europe needs a wage-led recovery. *Policy viewpoint*. [Online]. Available at: <http://www.feps-europe.eu/assets/fe43d974-3668-4648-bbb4-3ad8b6c86659/pv-3-2015-oov1pdf.pdf> [accessed 29/12/2015]

Rowthorn, R. 1995. Capital formation and unemployment. *Oxford review of economic policy*. Vol. 11, no.1

Stockhammer, E., Klär, E. 2011. Capital accumulation and unemployment in the medium run. *Cambridge Journal of Economics*, 35, pp. 437–457.

Stockhammer, E., Onaran, O. 2011. Rethinking wage policy in the face of the euro crisis. Implications of the wage-led demand regime. *Economic discussion papers of Kingston University London*.