THE ANTI-BLANCHARD MODEL AND STRUCTURAL CHANGE IN LATIN AMERICA: AN ANALYSIS OF CHILE. ARGENTINA AND MEXICO

Samuele Bibi

Bibi, S. (2020). The Anti-Blanchard model and structural change in Latin America: An analysis of Chile, Argentina and Mexico. *Cuadernos de Economía*, 39(80), 499-522.

This paper was born with the purpose of encouraging academic debate within the economic discipline that has been dominated by a purely orthodox or main-stream approach. One of the most innovative books in the expository-pedagogical part and its content is represented by the *Anti-Blanchard macroeconomics* by Emiliano Brancaccio. Beyond the analysis of the two contrasting models, the Anti-Blanchard model is used to study the situation in several Latin American countries. In particular, the structural change happened in those countries since the stronger wave of increasing neoliberal policies seem to fit particularly well in the explanation of the Anti-Blanchard model.

Keywords: Mainstream economics; heterodox economics; distribution; productivity; real wage.

JEL: B5; E11; E12; E24; J5.

University of Trento, Trento, Italy. E-mail: samuele.bibi@gmail.com

Seggested citation: The Anti-Blanchard model and structural change in Latin America: An analysis of Chile, Argentina and Mexico. *Cuadernos de Economía*, 39(80), 499-522. doi: https://doi.org/10.15446/cuad.econ.v39n80.83267

Este artículo fue recibido el 30 de octubre de 2019, ajustado el 27 de enero de 2019 y su publicación aprobada el 31 de enero de 2020.

S. Bibi

Bibi, S. (2020). El modelo Anti-Blanchard y el cambio estructural en América Latina: un análisis de Chile, Argentina y México. *Cuadernos de Economía*, 39(80), 499-522.

Este artículo nace con el propósito de alentar el debate académico dentro de la disciplina económica que ha sido dominada por un enfoque puramente ortodoxo o convencional. Uno de los libros más innovadores en la parte expositiva-pedagógica y su contenido está representado por la *Macroeconomía Anti-Blanchard* de Emiliano Brancaccio. Más allá del análisis de los dos modelos contrastantes, el modelo Anti-Blanchard se utiliza para estudiar la situación en varios países latinoamericanos. En particular, el cambio estructural ocurrió en esos países, ya que la ola más fuerte de políticas neoliberales en aumento parece encajar particularmente bien en la explicación del modelo Anti-Blanchard.

Palabras clave: economía ortodoxa; economía heterodoxa; distribución; productividad; salario real.

JEL: B5; E11; E12; E24; J5.

Bibi, S. (2020). O modelo Anti-Blanchard e a mudança estrutural na América Latina: uma análise do Chile, Argentina e México. *Cuadernos de Economía*, 39(80), 499-522.

Este documento nasce com o propósito de incentivar o debate acadêmico dentro da disciplina econômica que foi dominada por uma perspectiva puramente ortodoxa ou convencional. Um dos livros mais inovadores na parte expositiva-pedagógica e seu conteúdo está representado pela *Macroeconomia Anti-Blanchard* de Emiliano Brancaccio. Além da análise dos dois modelos contrastantes, o modelo Anti-Blanchard se utiliza para estudar a situação em vários países latino-americanos. Particularmente, a mudança estrutural ocorreu nesses países, já que a onda mais forte de políticas neoliberais em aumento parece encaixar particularmente bem na explicação do modelo Anti-Blanchard.

Palavras-chave: economia ortodoxa; economia heterodoxa; distribuição; produtividade; salário real.

JEL: B5; E11; E12; E24; J5.

Those who make peaceful revolution impossible will make violent revolution inevitable.

Kennedy (1962)

INTRODUCTION

Throughout history, few economics manuals have been as successful and have become widespread in university circles as *Macroeconomics* by Olivier Blanchard. Blanchard is one of the most well-known and influential academic economists in the world. He is also the founder and, until recently, director of the IMF's research centre. The first version of his *Macroeconomics* manual is from 1996. The manual written by Blanchard has been one of the masterpieces that was used to train many economists at university level in the U.S., Europe, and throughout Latin America; it also influenced the policies they designed and supported once they were in public institutions.

Blanchard's textbook, both analytically and theoretically, represents one of the most advanced expressions of mainstream thinking: the currently dominant macroeconomic theory. This represents the synthesis between traditional theory, namely the neo-classical synthesis, and neo-Keynesian economics, also called "new consensus". In recent decades, this school of thought has assumed a hegemonic position in academia. It is also the headlight and point of reference for the political institutions of Western countries that, since the 1990s, and more particularly in recent years of crisis, have followed the related economic policies prescriptions. It must be recognised that several mainstream economists, including some of the most prominent such as Blanchard himself, have recently been more open to considering alternative visions of critical economics, because they are based on real socio-economic facts and they have a greater capacity to explain the crisis.

Brancaccio's alternative model is inspired by the economic literature called "critical theory" that takes inspiration from figures such as Karl Marx, Michal Kalecki, John Maynard Keynes, Piero Sraffa and others. Without any doubt, Keynes's contribution is present in both traditions. However, for orthodox economists, Keynesian theory is nothing more than a special short-term case of the neoclassical tradition; critical economists, on the other hand, attribute it with a general and long-term structural value. To open the academic economic arena and make it more suitable for a real debate, the Anti-Blanchard manual is currently being translated into Spanish¹ and will be available in the months following the publication of this paper.

¹ The Anti-Blanchard book will be available in Spanish by Brancaccio and Bibi in the months after the publication of the current paper.

This paper is structured as follows. The next section² retraces Blanchard's model by analysing the structural macroeconomic functioning of an economy and its explanation of the labour market. This is followed by a reconsideration of the core of the critical Anti-Blanchard model. The paper goes on to conduct an explorative exercise by attempting to use those models to question which one has a better explanatory function for some OECD countries with respect to widespread and current policies such as the push for increasing labour productivity that is accompanied by the simultaneous flexibilization and liberalization in the labour market. Next, the focus goes on three Latin American countries for which data are available: Chile, Argentina and Mexico, and it investigates if these cases fit into the mainstream story or into the Anti-Blanchard one. Finally, conclusions are drawn at the end of the paper.

BLANCHARD'S MODEL

Blanchard's mainstream model is defined as a general macroeconomic equilibrium model with market imperfections. In fact, it does not describe a purely competitive abstract economic system. On the contrary, this economic system admits the role of trade unions as an indicator of the workers' conflict and the degree of market competitiveness, opening the possibility to even analyse the presence of markets that are not perfectly competitive.

The Blanchard model is also called the AD-AS model. The AD represents the aggregate demand, which is generated from the IS-LM model; the AS relation indicates the aggregate supply determined by the labour market model and the main factors that affect the productive choice of companies (cost of energy and other raw materials).

The IS-LM model allows the production values and interest rate that balance the goods market (IS) and the money market (LM) to be derived. Thus, it is possible to track the aggregate demand curve (AD), which has an inverse relationship between the price level and the demand for goods and, therefore, production. The aggregate demand equation is represented as follows:

AD:
$$Y = f(G, T, M/P)$$
 (1)

The inverse relationship between prices P and the demand for goods, and, therefore, production —Y— is explained by the fact that an increase in prices leads to a reduction in the real value of foreign exchange stocks (M/P) held by the population. People react to this contraction of monetary stocks by selling financial assets at their disposal to obtain greater liquidity. This operation causes asset prices to

² Sections *Introduction* and *Blanchard's model* were based on the divulgation work produced by Enrico Turco inside the Rethinking Economics movement. https://www.rethinkecon.it/blanchard-e-lanti-blanchard-parte-i/ Rethinking Economics movement was born in England with the mission of fostering academic debate in the economic field that has relied almost exclusively on the "dominant model" or mainstream of which Blanchard is one of the most prominent authors.

fall, and, thus, raises the interest rate. The consequence is a decrease in investments, which have now become more expensive to finance, a fall in demand and, therefore, in production and employment. The decrease in AD is a fundamental hypothesis for the operation of the mainstream model: a hypothesis that will be at the centre of criticisms of Brancaccio's analysis.

The labour market model allows the aggregate supply (AS) to be determined. In the labour market there are two curves that represent (i) the real wages required by workers and (ii) the real wages offered by employers. The first equation, W/P = F(u, z), states that real wages required by workers have a function that is negatively correlated with the unemployment rate (u) and positively correlated with a residual variable that mainly captures the level of conflict, or workers' protection (z). In other words, the higher the unemployment rate, the greater employers' bargaining power and the lower the wages required by workers. This takes into account workers' degree of conflict and greater protection for them, for example due to better legislation to protect workers and the norms against unjustified dismissals. These require greater wage demands.

The real wages are defined based on the price at which the employers decide to apply to the goods sold. The price function is: $P = (1 + \mu) W/A$. Thus, the price at which the goods are sold is determined by the cost of labour per unit of goods, W/A (W = wage, A = productivity), plus a profit margin for each piece of merchandise sold: μ . This is influenced by the degree of market competitiveness: if there is a lot of competition in the market, companies will be forced to apply a lower profit margin to be more competitive; On the contrary, if markets are more concentrated, companies have greater market power and will set prices, and, therefore, higher margins. The most important thing is that, according to Blanchard's model, the profit margin, z, as well as productivity, A, is an exogenous parameter that companies will maintain, at least in the short term, always unchanged. This means that, if nominal wages increase, companies will decide to increase their prices proportionally, keeping the fixed profit margin. As we will see later, this also represents another postulate that Brancaccio will question in his alternative model. With some minor modifications, we obtain the equation for real wages offered by entrepreneurs: W/P = A/(1 + μ), where both A and μ are constant.

The intersection of the two real wage curves determines the only wage level at which the wage supply of the companies meet the workers' wage demand. For this reason, the unemployment rate associated with this situation is defined as the natural unemployment rate, that is, the natural state of the economy to which market forces should tend: the only one capable of guaranteeing price stability and of wages. In fact, in all other cases inflationary or deflationary pressures occur, respectively, if the unemployment rate is lower or higher than its natural level.

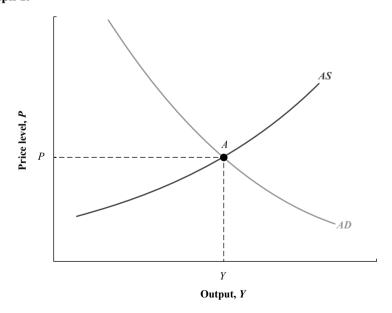
The previous analysis allows us to identify the aggregate supply curve and then arrive at the full AD-AS model. The aggregate supply, obtained from the equality of the two wage curves and some additional substitutions, is defined as follows:

AS:
$$P = [(1 + \mu) / A]P^e F(1 - Y / AL; z)$$
 (2)

Equation (2) presents a direct relationship between production Y and price P: if production Y increases, the unemployment rate decreases (u = 1-Y/AL). In this way, workers —who gained greater contractual force— require wage increases that companies, given the constant profit margin, finally charge through higher prices P. Once the equations of aggregate demand and aggregate supply are generated, the AD-AS model is ready. It is represented by the intersection of the two curves: the decreasing AD and the increasing AS. Their intersection determines a level of prices (ordinate axis) that is compatible with the level of natural production (x axis) and, therefore, with the natural unemployment rate (labour market model) that represents the state of equilibrium to which market forces tend to bring the economy during periods of tranquillity.

Before examining the alternative model, it is advisable to see the AD-AS model in operation. Suppose we are in a recession situation due to entrepreneurs' lack of confidence in the future that is characterized by a fall in investments and, thus, from the aggregate demand from AD to AD' (Figure 2). In a situation like this, the level of production is lower than that of equilibrium, just as the unemployment rate is higher than its natural level. High unemployment weakens workers, who will be forced to moderate their wage demands; nominal wages are also reduced. At this point, companies will proportionally reduce prices to be more competitive, assuming they do not "take advantage" of the wage contraction and keep their profit margin unchanged, μ . The reduction in prices leads to a decrease in expected prices, which, in turn, leads to a new reduction in wages, etc. The economy goes into a deflationary spiral, and, thus, the AS moves down (from A' to A'').

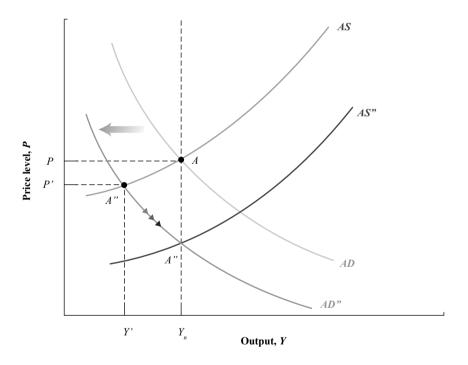
Graph 1.



Source: Blanchard (2010).

What will be the impact of the price reduction on demand? It is important to remember what was defined at the beginning of Blanchard's model regarding the decrease in AD. The price reduction will lead to an increase in the real value of monetary stocks (M/P) held by the population. Excess monetary stocks will be invested in financial assets, which will lead to an increase in their prices and, in that way, a reduction in the interest rate. The reduction in interest rates will result in the levelling of all rates in the financial market, including that required by banks to grant loans. In this way, it will be more favourable for entrepreneurs to borrow and make new investments, which will increase demand, production and employment. These movements (which move the AD curve along the AS curve) will take place until the level of production returns to the equilibrium level prior to the crisis (when the unemployment rate will nearly have returned to its natural level).

Graph 2.The Effects of a Fall in Investments Due to a Crisis of Confidence on the Part of Entrepreneurs



^a It should be stressed that the original chart on p.166 shows the reduction of the budget deficit by the Government. However, the effects of a fall in investments would result in the same mechanism of falling DA and adjustment through an expansion of the AS. Source: Blanchard (2010).

To conclude, the AD-AS model shows us that market forces, if left alone, are able to return the economy to its equilibrium level, without the need to resort to expansive policies by central authorities.

In addition, other conclusions that can be drawn are the neutrality of money and the virtue of wage moderation, which is a legal framework that weakens, rather than protects, workers and pushes them to moderate wage demands. This should translate into a greater demand for labour by companies and, therefore, a permanent reduction in the unemployment rate. It is evident, as Brancaccio writes, that "the AD-AS model allows us to confirm some typical laissez-faire positions." However, the two fundamental postulates on which Blanchard's model rests are (i) the decreasing inclination of the AD, and (ii) the exogenous nature of the profit margin and the conflict of workers. Brancaccio's criticism will be concentrated around these two hypotheses and then translated into an alternative macroeconomic model that can be compared to the mainstream model.

BRANCACCIO'S ANTI-BLANCHARD MODEL: A CRITICAL ANALYSIS³

Let us now analyse these last two points on which the Anti-Blanchard critical analysis is based.

First of all, to analyse an economy, it is useful to ask ourselves what happens when the AD is not decreasing as well as the reason for this possibility. Brancaccio perfectly explains that this situation occurs, according to the defenders of the critical economy, due to the possible manifestation of three motivations, all destined to break the causal link between the price reduction (and the consequent increase in monetary stocks held by the operators) and the increase in investments and aggregate demand.

- 1. The first motivation is due to the known case of the "liquidity trap" that was pointed out by Keynes himself: when monetary stocks increase in real terms (M/P), traders generally try to get rid of them by investing in securities. However, if the operators' expectations regarding the securities in which they should invest are those relating to future price reductions, then these purchases will not be made in view of a possible loss of capital. If this occurs, a reduction in prices (and an increase in monetary stocks) will not result in a reduction in the interest rate and, as a consequence, there will neither be an increase in investments.
- 2. Even if the liquidity trap does not take action, nothing determines that a reduction in the interest rate stimulates investments: in fact, investors

³ Sections *Brancaccio's Anti-Blanchard model: A critical analysis* and *The study of several OECD countries subject to increased productivity and liberalization of the labour maket* have been translated and adapted from the research carried out by Samuele Bibi http://www.rethinkecon.it/blanchard-e-lanti-blanchard-parte-ii/

may be (and generally they are) more attentive to the future profitability of their investments and earnings than to the interest rate. Even if the interest rate collapses, investors may not invest in new machinery and productive capacities if there is no clear vision on the horizon, both for possible economic crises and for other political and institutional reasons.

3. The third channel that could undermine the inverse relationship between prices and aggregate demand refers to the complexity of production. Assuming a single homogeneous good in production can greatly simplify the didactic explanation, but at the same time this assumption is a misleading tool with respect to the relationships between the varieties of goods produced and the means of production. This topic has been and continues to be very complex and debated and we will limit ourselves to a brief reference. Since the interest rate can be considered as a cost of production for companies, when this decreases, there is no absolute univocal relationship to the extent that it affects the sales prices of products since these can increase, but also decrease.

Considering the three previous channels of a decreasing AD rupture, Brancaccio tries to consider a "vertical AD" linking it, at this point, with the equations that determine the labour market. A vertical AD implies that possible reductions in wages (and prices) may not have an expansive impact on aggregate income. If the AD is vertical, although the AS increases (due to the reduction in labour costs), it would only result in a reduction in prices, leaving the level of income and production unchanged (that is, without returning the system at any "natural" level).

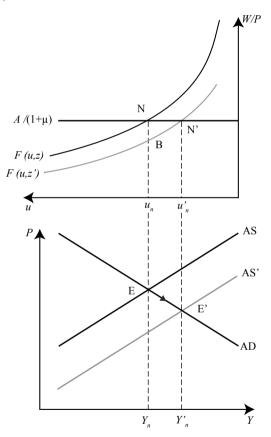
With regard to the labour market, the second criticism can be considered: Blanchard's model assumes that the profit margin and the "workers' conflict" (which constitutes nothing more than its degree of protection and claims) are exogenous data, not influenced by the balance of power between workers and companies. Using Marx's analysis again, one can question this hypothesis, arguing that both the production and the distribution of the product in the economy are deeply influenced by the balance of power between the social classes. In this way, the macroeconomic and distributive analysis between workers and capitalists is reversed despite using Blanchard's same tools.

Brancaccio analyses various case studies in detail and explains all possible outcomes considering the exogenous or endogenous nature of one or both of these parameters. It is essential to keep in mind that, being both endogenous, we can no longer speak of a "natural" unemployment rate.

For exposure limits, we will focus on the analysis of an interesting and quite current case: the case of a policy that favours the increase of labour productivity (A) and the simultaneous flexibility (z) —mainly downward— of wages. According to the general approach, the last effect should increase employment and the level of aggregate demand. In fact, this economic policy channel has been followed and encouraged in the last decade, in Italy, as well as in most of the countries of the European Union, in the United States and in several Latin American countries.

According to Blanchard's analysis, it is easy to see how, by acting on these two parameters, the function of real wages offered by entrepreneurs can be increased (corresponding to equation "ii" above, $W/P = A/(1+\mu)$), at the same time decreasing the real wage required by the workers (corresponding to the equation "i" indicated above, W/P = F(u, z)): everything is taken into account, assuming that companies do not take advantage of the weakness of workers trying to increase their profit margin.

Graph 3. Wage Moderation (z' < z) Leaves Real Wages Unchanged and Reduces Unemployment (z' < z)



It is important to highlight that in the case we are proposing, in addition to a downward movement of the function of real wages requested by workers, from F (u, z) to F (u, z'), we also have an upward shift of the function of real wages offered by companies, due to increased productivity.

Graph 3 is the graphical representation of the first effect only.

Source: Anti-Blanchard, Brancaccio (2019), p. 34.

Based on the hypotheses, these two policies would lead to a certain decrease in employment and, especially in a crisis situation, they would work through an unquestionable greater growth of the economy, acting on the increase of the aggregate supply that could stimulate aggregate demand.

What would these two policies imply through a critical analysis of Brancaccio with a vertical AD and considering the possibility of conflicting power relations between the working classes and the firms (assuming that z and the profit margin are adjusted according to the latter)?

Since the margin does not move, the increase in worker productivity (A) automatically translates into an increase in real wages, but this assumption is exceptionally strong. In fact, it can be assumed that the increase in workers' productivity does not fully translate into an increase in real wages, but that it is completely absorbed by an increase in the profit margin of companies seeking to benefit from their lead position. In this case, the function of salaries offered by companies would not increase at all.

The policy of increasing wage flexibility, on the other hand, as in the case analysed by Blanchard (2010), would have the consequence of reducing the function of the wages they requested. At this point, given the reduction in workers' bargaining power, it would not be completely absurd to imagine that companies continue to press to increase their profit margin that is now endogenous and variable in relation to power relations exploiting their position of relative advantage. Therefore, it would be possible that the function of the real wages offered will fall even more to the point of equilibrium with the function of the required wages and reach exactly the same level of unemployment as there was before the increase in productivity and wage flexibility.

Policies have favoured a more unequal redistribution of resources. Companies have absorbed the workers' increase in productivity without seeing a real wage increase (which should have increased precisely due to their increase in productivity) or the level of employment.

There is one last question: at the aggregate level, what happened to the aggregate level of production determined by the intersection between the AD and the AS? In the most optimistic case, nothing. The AD, in fact, staying upright would not allow an expansion of the AS to have a positive impact at the aggregate level. Meanwhile, the AS has expanded, lowering the price level through a dangerous deflationary spiral without increasing GDP.

In the worst case scenario, given the perpetuation of the reduction in the price level, both families and businesses could expect a new price reduction. If deflationary expectations at the aggregate level are sufficiently consolidated and generalized, agents would probably postpone consumption and investments. In this case, the economy would endogenously deteriorate, negatively reducing the level of aggregate demand and the price level even more, making economic recovery more-and-more difficult.

THE STUDY OF SEVERAL OECD COUNTRIES SUBJECT TO INCREASED PRODUCTIVITY AND LIBERALIZATION OF THE LABOUR MAKET

Is the scenario in section *Brancaccio's Anti-Blanchard model: A critical analysis* been too pessimistic? Perhaps. We hope it is. We hope that the increase in labour flexibility has not meant that companies have taken advantage of their new position of relative advantage, or at least not completely. We also hope that a possible constant increase in productivity has been fully or at least partially reflected in an increase in the real wage of the workers who produced this result.

The scenario is probably never as clear as described in textbooks and, certainly in reality, many other variables come into play. For example, the following cases refer to countries with open economies, and, in this situation, international flows and exchange rate variations can definitely have a strong effect on the dynamics within such economies. However, if the theoretical foundations, more or less implicit in the policies implemented for more than a decade in the European, American and several Latin American labour markets (labour flexi-bility and productivity increase) were correct, we should expect a constant and conspicuous reduction in unemployment and an increase in real wages along with the increase in productivity.

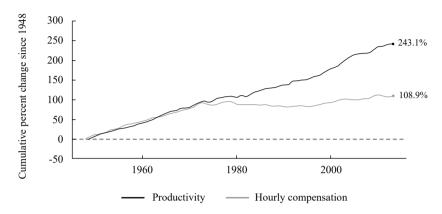
The data on the decrease in unemployment are covered on an almost daily basis on news programmes: the message does not seem to be too encouraging. Much less is said of the analysis that refers to the increase in workers' productivity and the real wage they receive.

The following figure is a graph shown by the Nobel Prize in Economics winner Joseph Stiglitz at the Trento Economics Festival during an INET - Institute for New Economic Thinking – conference in 2015.

As reported in Gould (2014), "from 1948 to 1979, productivity increased by 108.1 percent and hourly wages increased by 93.4 percent. From 1979 to 2013, productivity increased by 64.9 percent and hourly wages increased by 8 percent." There are doubts about the existence of a direct relationship between the increase in workers' productivity and the real wage that they finally receive.

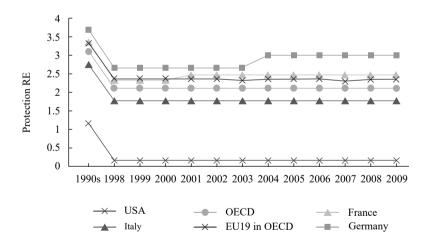
As for Europe, the situation does not differ much: in a 2014 article written by Tridico (2014) highlights how, in Italy, the "EPL", the Employment Protection Law, has weakened for both regular employees and for temporary workers, as can be seen in the following figures. The majority of the other European states have followed Italy's general trajectory, although in different measures.

Figure 1. Disconnect Between Productivity and Typical Worker's Compensation in US, 1948-2013

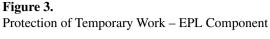


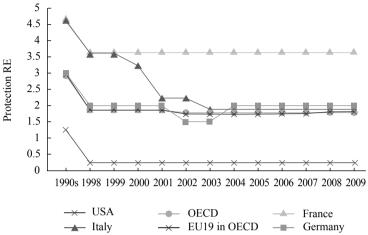
Source: Gould (2014).

Figure 2. Protection of Regular Work – EPL Component



Source: Tridico (2014).

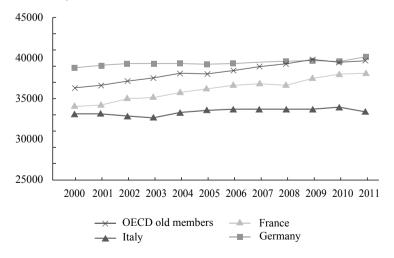




Source: Tridico (2014).

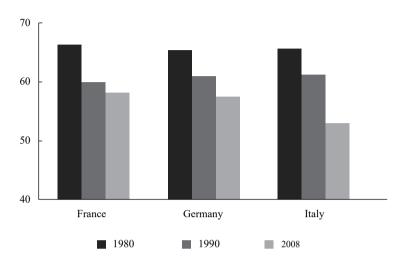
Even in Italy, real wages have not increased dramatically. As Tridico (2014) details, in 2011 the country was at the same levels as in the late 1990s (Figure 4). The wage participation rate has also been drastically reduced both in Italy, in France and Germany (Figure 5).

Figure 4. Annual Salaries, in US \$ 2011 PPP Cost Prices



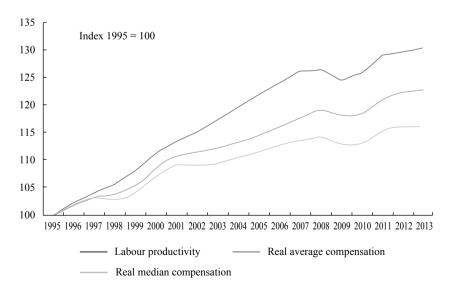
Source: Tridico (2014).

Figure 5. Salary Participation Rate in % of total income



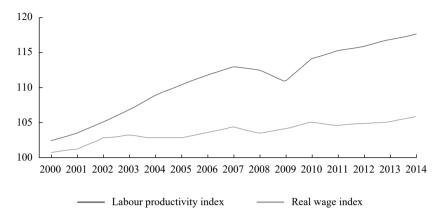
Source: OECD (2008) and ILO (2013).

Figure 6.Real Median Wages Have Decoupled From Labour Productivity



Source: OECD (2018).

Figure 7.Trends in Growth in Average Wages and Labour Productivity in Selected Advanced G20 Economies, 2000-2014



Source: (ILO O. I., 2015)

The policies that pushed to increase productivity together with labour liberalization in the US and in Italy, as well as in the majority of the OECD and G20 countries (Figure 6 and 7) did not translate into a simultaneous increase in real wages.

THE ANTI-BLANCHARD MODEL APPLIED TO CHILE, ARGENTINA AND MEXICO

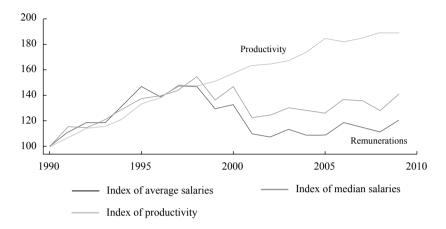
What was the experience of Latin America regarding the points being analysed?

At the moment there are not enough data to carefully analyse all the Latin American countries, and we could also not analyse them all for explanatory reasons. Thus, we decided to focus all attention on the countries that acted on these policies (increased productivity and, above all, on wage flexibility) more strongly than others: Chile, Argentina and México.

Although labour flexibilization policies have been introduced in Chile almost without interruptions, from 1975 onwards it was the new millennium that marked a crucial stage in labour flexibility. In fact, in 2001 a labour reform was promoted. This meant a growth for temporary jobs and an increase in the precariousness of work conditions (Segovia, 2014).

Figure 8 shows the gap between productivity and wages that has been widening in Chile since the new millennium when the policy of greater labour flexibility was promoted. While productivity in Chile increased from 150 to more than 190 at the end of the decade, the average wage index fell during the same period from 150 to below 120.

Figure 8.Gap Between Productivity and Typical Compensation of a Worker in Chile, 1990-2009



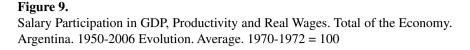
Source: Durán Sanhueza (2015).

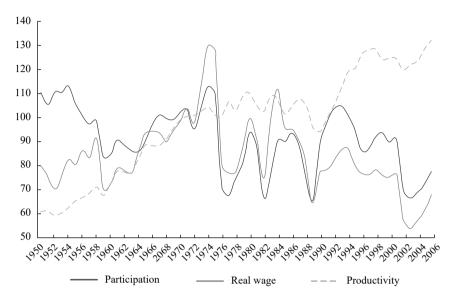
This phenomenon has undoubtedly contributed to worsening Chile's social redistribution that is already characterized as one of the most unequal countries in the world. In 2013, in Chile, the richest 1% of the country in terms of income held more than 30% of the country's total income (Durán Sanhueza, 2015). Recently, the Chilean government once again emphasized the need for greater wage flexibility (González & Marchetti, 2019).

Argentina also adopted a strong labour flexibility policy. Rial (2015) highlights how the policy in Argentina has only produced greater job insecurity; it has not increased employability, which was supposed to be the objective of this policy: "Our country was no neutral to the "flexibilization" wave that was installed in Europe and Latin America, deepening further in the 90s. The National Employment Law (Law 24.013) was the first regulatory body that dealt with the flexibility in the individual contract of work..." (Rial, 2015).⁴

Also in Argentina, especially during the years of neoliberal policies that have included greater labour flexibility, Figure 9 shows how the gap between productivity and real wages has been growing. In particular, this gap widened during 1976-1982 as well as during the strong neoliberal package in the '90s.

⁴ The original Rial (2015) work is in Spanish: "Nuestro país no fue ajeno a la corriente flexibilizadora que se instaló en Europa y en América Latina, profundizándose en la década del 90. La Ley Nacional de Empleo (Ley 24.013) fue el primer cuerpo normativo que se ocupó de la flexibilización en el contrato individual de trabajo..."





Source: Kennedy and Graña (2010).

Finally, we analyse the case of Mexico. Here probably the most updated data seem to be the ones reported in Munguía Corella (2019) that use real data updated to 2019 with respect to productivity, real wage, unionization rate and profits.

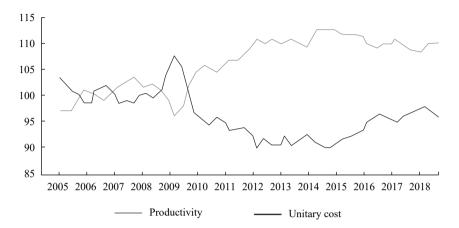
Corella (2019) explains that often during the last decades the story of low productivity has been usually used to justify the not growing real wages. However, the data presented exactly show the opposite. The productivity has been increasing, especially during the last two decades. At the same time, it is argued that the real wage has been actively maintained low thanks to the monopsony power in bargaining the labour contracts with workers (Figure 8).

The process of liberalization through labour flexibility and the effort to decrease the union power (the z in our model) succeeded in maintain the workers power low. The policies to weaken the union power resulted in a collapse of the union participation rate from 18% at the end of the 90s to about 2% in 2018 (Figure 9).

Corella (2019) argues that not only the labour productivity increased while real wage didn't follow that trend. Indeed, it argues that the two variables seem to move in a specular way. Figure 10 that analyses the productivity and real wage relationships at subsector level shows this effect.

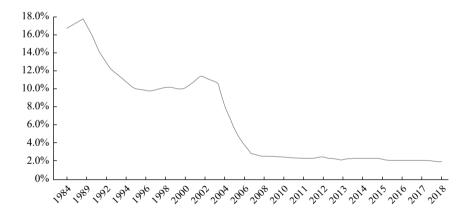
Finally, Corella (2019) shows a further interesting figure and give itself an explanation related to the interpretation that could be given with the Anti-Blanchard

Figure 10.Labour Productivity and Unitary Labour Cost in Manufacture Industry. Index 2008 = 100



Source: Munguía Corella, 2019.

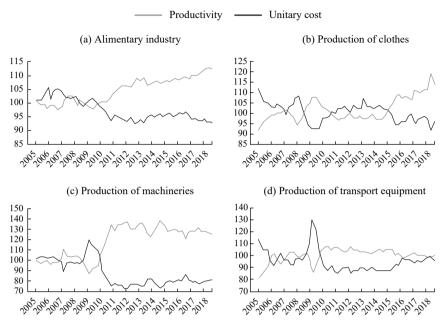
Figure 11. Sindacalization Rate in Mexico



Source: Munguía Corella, 2019.

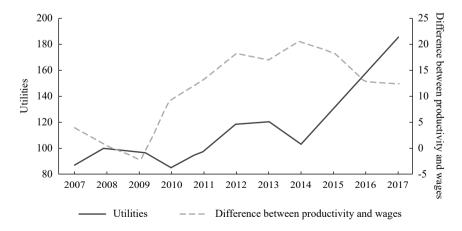
model. In fact, Figure 11 shows that while the gap between increasing productivity and real wage is produced, profits seems to grow very quickly underlining a very strong correlation between those two variables. Not only there is a phenomena of increasing gap between labour productivity and real wages linked to the debilitating policies. Furthermore, firms seem to take advantage of the weakness of the workers to increase their own compensations and profits for managers and owners of the firms.

Figure 12.Labour Productivity and Unitary Labour Cost in Subsector of the manufacture Industry. Index 2008 = 100



Source: Munguía Corella, 2019.

Figure 13. Relation between the productivity-wage gap with the utilities in manufacturer industry Utility Index 2008 = 100



Source: Munguía Corella, 2019.

CONCLUSIONS

In this paper we focused both on analysing the theoretical debate between one of the most influential mainstream model —represented by the description contained in Macroeconomics by Blanchard (2010)— and the critical analysis contained in the Anti-Blanchard model by Brancaccio (2019). It is shown how, despite using the same Blanchard tools, Brancaccio is able to arrive to very different conclusion using different hypothesis more related to real life scenario.

Also an empirical exercise is carried out, both for OECD countries and for the Latin American countries. The cases of US and Italy are investigated. The situations of Chile, Argentina and Mexico are analysed and the structural change happened in those countries with increasing neoliberal policies is considered. Despite it is recognized that those countries are opened economies and therefore international interactions can absorb or influence the different economic variables beyond the Blanchard and Anti-Blanchard analysis, the overall theoretical framework and comparison exercise can still be useful.

In particular, it is questioned that the mainstream model - such as the one contained in Macroeconomics by Blanchard - is able to explain the dynamics happened in those countries in the last decades. Quite the contrary, the dynamics and the story of US and Italy as well as the ones in Chile, Argentina and Mexico fit the Anti-Blanchard explanation particularly well. It is found that the liberalization and flexibilization of the labour market, for example through the increasing weakening of the workers' union and the weakening of the Employment Protection Law, led to a stagnant or decreasing workers' real wages despite their productivity increased over time.

In the US from 1979 to 2013, despite the flexibilization of labour market together with an increase in productivity by 64.9% did not translate into a parallel increase in the hourly wages that increased by only 8 percent. Similarly, the liberalization and flexibilization of the labour market in Italy didn't bring to an increase of the annual wages that remained fairly constant with a wage share that actually decrease by 10% between the 1980s and the 2008. A similar figure is found for the whole OECD and G20 countries that exhibited an increasing decoupling dynamic of real wage from labour productivity.

Latin American countries are not characterized by a different situation. Quite the contrary, the current strikes and protests in Chile and Argentina are the manifestation of the dissatisfaction of a stagnant or decreasing workers' compensation that did not follow the ever increasing labour productivity. Again, even in those cases, the liberalization and flexibilization policies of the labour market together with the push toward an increasing productivity promoted by the neo-liberal governments did not fit into the story of better workers' conditions of the mainstream point of view that would have led to an increase of the workers' real wage and standard of living.

Even if its situation did not explode yet into protests and visible workers' dissatisfactions such as that in Chile and in Argentina, Mexico is represented by a very similar situation. A liberalization of the labour market and weakening of the workers' union together with an ever increasing labour productivity did not translate into a parallel increase of workers' compensation in any sectors. A strong correlation is found between the gap in the real wage-workers' productivity and the management compensations and capitalists' profits. Again here, the Anti-Blanchard ana-lysis seems to fit the description of the Mexican situation very well, much better than the mainstream one.

While it may be imprudent to blame only labour flexibility for the sole cause of the situation of workers' real wages in Chile and Argentina and for the ineffectiveness in increasing the level of employability, it should be noted that:

The experience developed in more than one hundred countries, gathered by the International Labor Organization, as well as numerous articles on the subject, has shown that labor flexibility in all its different forms has not been an effective tool to improve employability. In developed countries it has precarious formal employment and in developing countries it has alarmingly promoted labor precariousness. (Rial, 2015)

In the light of the data, Blanchard's model, even though didactically well-constructed and exposed, does not seems to perfectly represent reality. On the contrary, Brancaccio's model and critical economics, although they offer a more "painful" interpretation of economic mechanisms, seem to describe the last decades in the US, in Europe such as in several Latin American countries in a more realistic way. The positive side of this vision is that we are not yet in an irreversible phase and that the path, if we wish, can still be changed.

ACKNOWLEDGMENTS

I would like to thank Emiliano Brancaccio, true source of inspiration of this work, and Marco Veronese Passarella for the enriching discussions about the different economic points of view that are the foundation of this work, and Enrico Turco who allowed me to translate the part of the article he wrote himself in Italian. Any errors or omissions remain only mine.

REFERENCES

- 1. Bibi, S. (2020) Keynes, Kalecki and Metzler in a dynamic distribution model. *Cambridge Journal of Economics*, 44(1), 73-104.
- Bibi, S., & Turco, E. (2014). https://www.rethinkecon.it/. Rethinking Economics Italia. Retrieved from https://www.rethinkecon.it/blanchard-elanti-blanchard-parte-ii/

- 3. Blanchard, O., Amighini, A., & Giavazzi, F. (2010). *Macroeconomics: A European perspective*. Harlow: Pearson Education Limited.
- 4. Brancaccio, E., & Califano, A. (2019). *Anti-Blanchard macroeconomics. A comparative approach.* Cheltenham, UK. Northampton, MA, USA: Edward Elgar.
- 5. Corella, L. (2019, April). Productividad, salarios y trabajo digno en México. *Fundación Friedrich Ebert*.
- 6. Durán Sanhueza, G. (2015). *Fundación Sol.* Retrieved from http://www.fundacionsol.cl/wp-content/uploads/2015/06/PPT DATOS.pdf
- 7. Durán, G. (2011). El día del trabajo decente y la dijera de la desiguladad en *Chile*. Fundación Sol. Retrieved from http://www.fundacionsol.cl/2011/10/el-dia-del-trabajo-decente-y-la-tijera-de-la-desigualdad-en-chile/
- 8. González, A., & Marchetti, P. (2019, Agosto). *Emol*. Gobierno pone suma urgencia a proyecto de flexibilidad laboral y anuncia indicación para tener jornada semanal de 41 horas. Retrieved from https://www.emol.com/noticias/Economia/2019/08/08/957402/Gobierno-le-pondra-suma-urgencia-a-proyecto-de-flexibilidad-laboral-y-anuncia-indicacion-por-horas-de-trabajo.html
- 9. Gould, E. (2014). Why America's workers need faster wage growth. And what we can do about it. *Economic Policy Institute*.
- 10. ILO. (2013). Global Wage Report 2012/2013. Geneve: ILO.
- 11. ILO, O. I. (2015). *Income inequality and labour income share in G20 countries: Trends, impacts and causes.* ILO, OECD, IMF, WB.
- 12. Kennedy, D., & Graña, J. (2010). El empobrecimiento de los trabajadores como fuente de excedente en economías con débil dinámica productiva. Argentina desde mediados del siglo XX. Pecvnia: Revista de la Facultad de Ciencias Económicas y Empresariales, Universidad de León, 231-263.
- 13. Kennedy, J. F. (1962, March 13). Address on the First Anniversary of the Alliance for Progress. *Public Papers of the Presidents John F. Kennedy*, p. 223.
- Munguía Corella, L. (2019). Productividad, salarios y trabajo digno en México. Ciudad de México: Fundación Friedrich Ebert.
- 15. OECD. (2008 Employment outlook), I. (. (2013). *Global Wage Report* 2012/2013. Geneve.: ILO. There is something wrong with this reference.
- 16. OECD. (2018). *Decoupling of wages from productivity: What implications for public policies?* OECD. Retrieved from http://www.oecd.org/economy/outlook/Decoupling-of-wages-from-productivity-november-2018-OECD-economic-outlook-chapter.pdf
- 17. Rial, N. (2015). *Derecho UBA publicaciones*. Retrieved from La flexibilidad laboral y sus consecuencias: http://www.derecho.uba.ar/publicaciones/pensar-en-derecho/revistas/11/la-flexibilidad-laboral-y-sus-consecuencias

- 18. Segovia, M. (2014, October). *El Mostrador*. Retrieved from https://www.elmostrador.cl/noticias/pais/2014/10/10/flexibilizacion-laboral-el-legado-de-la-concertacion-que-enciende-las-alarmas-a-nivel-internacional/
- 19. Tridico, P. (2014). From economic decline to the current crisis in Italy. *International Review of Applied Economics*.