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**MARCIN ANDERZEJ CZACHOR**

**The Political Economy of Full Employment**

**A Economia Política do Pleno Emprego**

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## **The Political Economy of Full Employment**

### **A Economia Política do Pleno Emprego**

**Prof. Dr. Paulo Sérgio Fracalanza – Orientador**

Dissertação apresentada ao Instituto de Economia da Universidade Estadual de Campinas como parte dos requisitos exigidos para a obtenção do título de Mestre em Desenvolvimento econômico, na área de Economia Social e do Trabalho.

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A handwritten signature in black ink, appearing to read "P.S. Fracalanza", is written over a horizontal line.

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A handwritten signature in black ink, appearing to read "P.S. Fracalanza", is positioned above the name of the first member of the jury.

**Prof. Dr. PAULO SÉRGIO FRACALANZA**  
Instituto de Economia / UNICAMP

A handwritten signature in black ink, appearing to read "C. Salas Paez", is positioned above the name of the second member of the jury.

**Prof. Dr. CARLOS SALAS PAEZ**  
Instituto de Economia / UNICAMP

A handwritten signature in black ink, appearing to read "Alexandre de Freitas Barbosa", is positioned above the name of the third member of the jury.

**Prof. Dr. ALEXANDRE DE FREITAS BARBOSA**  
Universidade de São Paulo/USP

## RESUMO

A questão em discussão neste estudo foi sobre a possibilidade de alcançar e manter o emprego na economia capitalista. A persistência do desemprego situa-se no coração do mal-estar econômico na grande maioria das sociedades modernas. É um fenômeno socioeconômico muito complexo, que poderia ser analisado em diferentes níveis. Neste trabalho foi feita uma investigação quanto aos aspectos políticos e econômicos do desemprego. No primeiro capítulo, o objetivo foi fornecer uma visão geral das explicações teóricas dos fenômenos de desemprego em economias capitalistas modernas. Foram propostas as seguintes periodizações das teorias de desemprego: a teoria clássica, Revolução de Keynes e a era pós-Segunda Guerra Mundial. No segundo capítulo investigaram-se alguns aspectos políticos do pleno emprego. Em primeiro lugar, são apresentadas recomendações de política econômica de Keynes que foram adotadas pela maioria das nações desenvolvidas após a Segunda Guerra Mundial. Em segundo lugar, tentou-se responder à pergunta de por que as políticas econômicas keynesianas foram abandonadas pelos países mais desenvolvidos na década de 1970, apesar de seu aparente sucesso. Conclui-se que o conceito de ciclo de negócios política, desenvolvido pelo economista polonês Michał Kalecki oferece pelo menos uma resposta parcial a esta pergunta. Para Kalecki, a eliminação do desemprego é perfeitamente possível, desde que o governo siga prescrições de Keynes. Este autor afirmou que os limites reais ao pleno emprego não são econômicos, mas sim políticos: um governo comprometido com o pleno emprego, necessariamente, enfrenta oposição política da comunidade empresarial. No terceiro capítulo foi discutido o desenvolvimento de uma relativamente nova escola de pensamento econômico que poderia ser considerada como um dos subgrupos da ampla corrente de Pós keynesianismo - a Teoria Moderna do Dinheiro e sua principal recomendação de política econômica, ou seja, empregador de última instância ou programa de garantia de trabalho.

Palavras-chave: pleno emprego, desemprego, políticas econômicas keynesianas

## **ABSTRACT**

The question under discussion in this study was the possibility of achieving and maintaining the employment in capitalist economy. Persistent unemployment lies at the heart of economic malaise in vast majority of modern societies. It is a very complex socio-economic phenomenon that could be analysed on different levels. In my work I choose to investigate both political and economic aspects of unemployment. In the first chapter my aim was to provide an overview of theoretical explanations of unemployment phenomena in modern capitalist economies. I proposed the following periodisation of the theories of unemployment : the classical theory, Keynes's Revolution and the Post-World War II era. In the second chapter I investigated some political aspects of full employment. Firstly, I have presented Keynes's economic policy recommendations that were adopted by most of the developed nations after World War II. Secondly, I tried to respond to the question why, in spite of their apparent success, Keynesian economic policies have been abandoned by most developed countries in the 1970s. I have come to the conclusion that the concept of political business cycle, developed by the Polish economist Michał Kalecki offers at least a partial response to this question. For Kalecki, elimination of unemployment is entirely possible, provided that government follows Keynes's prescriptions. He claimed that real limits to full employment are not economical, but rather political: a government committed to full employment will necessarily face political opposition of the business community. In the third chapter I discussed the development of a relatively new school of economic thought that could be considered as one of subgroups of the broad tent of Post Keynesianism – the Modern Money Theory and its main economic policy recommendation, i.e. Employer of Last Resort or Job Guarantee program.

Key words: full employment, unemployment, Keynesian economic policies

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## INTRODUCTION

This study is an attempt to address the issue of full employment. My interest concerning this subject matter comes from purely practical reasons – I am an active member of the trade union movement and the issues of employment and labour market policies are of crucial importance to my work. The aim of this work is not to resolve any particular theoretical problem – I consider it rather as a learning experience that helped me to better understand the complex problem of unemployment. I have decided to analyse the problem of labour market from the perspective of political economy because I believe that markets are always embedded in social relationships, cultural values, moral concerns, politics, etc... I believe that political economy offers us a better understanding of those problems than a purely economic perspective, that artificially dissociates the economic and political aspects of labour market.

Of course, I was not trying to downgrade the meaning of the economic science. The first chapter of my work can be perceived as a brief sketch of the history of economic thought, where I tried to present views of different schools of economic thought on the problem of unemployment. Economists have never reached a consensus on the problem of unemployment, and their opinions differ radically when it comes to theoretical conceptualisation of labour market, identifying the sources of unemployment and factors that prevent the economy from reaching the full employment level.

The second chapter deals directly with some political aspects of full employment. I presented Keynes's economic policy recommendation, whose implementation would allow to stimulate economy and to achieve and maintain a nearly full employment level in the long run. I also evaluated some historical examples of the usage of Keynesian policies in practice. In the last section of the chapter I presented the concept of the political business cycle, developed by Michał Kalecki and Joan Robinson.

I consider the third chapter of my work as the most important and also the most interesting. It presents a relatively new school of economic thought, called the Modern Monetary Theory (or Neo-Chartalism) that can be considered as one of the currents of the Post-Keynesian thought. The theoretical starting point of the MMT is the nature of fiat money, its creation, circulation and destruction in modern capitalist economies. This leads MMT economists to very

fascinating and provocative conclusions about budget deficits, public debts, taxation, and fiscal and monetary policies of the state. From the perspective of my work, the MMT approach to labour market and their claim that full employment and price stability are not mutually exclusive goals of public policy are particularly important.

## CHAPTER I : ECONOMICS OF FULL EMPLOYMENT

The purpose of the first part of my work is to present different economic theories of labour market and explanations of the phenomenon of unemployment. In order to make this difficult matter more comprehensible, I will focus only on those aspects of theories that are relevant to the topic of this thesis (i.e. full employment).

Exposition of different theoretical approaches to labour market, contained in this chapter, could be organised in different manners : by presentation of their historical evolution, by schools of economic thought, by a specific issue, etc... I opted for the mix of the first and second approaches. This choice has an advantage of not artificially isolating the economic theory from its social, political and historical determinants. That being said, the limited scope of this study necessitates focusing only on those thinkers and aspects of their theories that could be commonly considered as representatives for their respective school of thoughts.

Given those two considerations I decided to divide this chapter in 3 sections that will deal with the classical theory of unemployment, the Keynesian Revolution and theories of labour market after World War II.

### 1. THEORY OF UNEMPLOYMENT BEFORE KEYNES

In this section I will present the theoretical approaches towards employment and labour markets before the so-called Keynesian Revolution. To be more precise, the period of time under investigation here starts with the writings of William Petty (who is considered to be a pioneer of the scientific approach towards economy <sup>1</sup>), and ends with the publication of Keynes's magnum opus - *The General Theory of Employment, Interest and Money* in 1936.

The choice of this time frame may seem somehow arbitrary - after all, almost three centuries separate works of those two thinkers, and one could reasonably question the relevance of such periodisation. It could also be reproached that the analysed time period covers ideas and theories of such diverse thinkers as Karl Marx, Léon Walras and Alfred Marshall and contains

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<sup>1</sup> Alessandro Roncaglia : *The Wealth of Ideas: A History of Economic Thought*, Cambridge University Press 2006, p.53

at least one major epistemological paradigm shift<sup>2</sup> in economic thinking (the so-called Marginal Revolution of the 1870s').

I decided, however, to analyse this whole rich tradition of economic thought in one section because from the standpoint of my work the differences between them are insignificant<sup>3</sup>. In fact, the theoretical approach towards labour market and explanation of the causes of unemployment can be seen as a common denominator between the Classical (before the 1870s) and the Neoclassical (after the 1870s) Schools of Thought.

I will successively examine here three concepts that can be considered building blocks of the Pre-Keynesian theory of labour market : “Invisible hand” of Adam Smith, “Law of the markets” of Jean-Baptiste Say and the marginal theory of income distribution of J.B. Clark.

### 1.1 ADAM SMITH’S INVISIBLE HAND

Adam Smith (1723 -1790) is considered by many as a father of modern economics. But Smith was above all moral philosophers and his economic policy recommendation should be perceived as a consequence of his philosophical stance.

The starting point for Smith’s theory is his concept of human nature. He perceives human beings as essentially egoist and significantly driven by their self-interest. In a widely cited fragment from his “The Wealth of Nations” Smith observes : *“It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own self-interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages”*<sup>4</sup>.

What differs Smith’s vision from his predecessors is his moral appraisal of this narrowly self-interested actor. In earlier philosophical tradition egoistic behaviour was condemned as immoral and sinful. For Smith not only there is nothing perverse in such selfish behaviour, but rather it should be welcomed as something morally valuable. Adam Smith’s praise for the

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<sup>2</sup> In the sense used by Thomas Kuhn in his “The Structure of Scientific Revolutions”.

<sup>3</sup> With a notable example of economists working in the Marxist tradition.

<sup>4</sup> Adam Smith : *“An Inquiry into the Nature and Causes of the Wealth of Nations”*, Book I, Chapter II : *Of the Principle which gives Occasion to the Division of Labour*, p.26-27 (Indianapolis: Liberty Classics, 1981), eds Andrew S. Skinner and R.H. Campbell.

selfishness was adequately characterized by Jack Weinstein as a “tectonic shift in moral prescription”<sup>5</sup>.

According to Smith, if only individuals could pursue their self-interest unhindered, society as a whole would be better-off. To explain this apparent paradox Smith uses a metaphor of an invisible hand of the market : “...every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.”<sup>6</sup>.

In Smith’s vision, society is composed of selfish and rational *homo economicus* maximising their material wealth. From this pessimistic presupposition about human nature, he draws very optimistic conclusions about prospects of society. The “invisible hand”, that is nothing more than a market mechanism, serves as a coordinating mechanism that directs this selfish behaviour in such a way that it increases public wealth. As Bernard Mandeville put it, thanks to the invisible hand (“invisible cooperation”) “private vice becomes a public virtue”<sup>7</sup>.

But the “invisible hand” will lead to increased public wealth and efficient allocation of resources (capital, labour and land) only when individuals are not disturbed in their constant seek of increased wealth. Therefore, Smith was a fervent opponent of all kinds of governments’ interventions in economy: regulations, monopolies, subsidies, etc... The state’s role ought to be strictly limited to ensuring public safety, maintaining public institutions and enforcement of contracts.

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<sup>5</sup> Jack Russell Weinstein: “Adam Smith (1723—1790)” in “Internet Encyclopedia of Philosophy: A Peer-Reviewed Academic Source”. <http://www.iep.utm.edu/>

<sup>6</sup> Adam Smith: “An Inquiry into the Nature and Causes of the Wealth of Nations”, Book IV, chapter II, paragraph IX, p.456. (Indianapolis: Liberty Classics, 1981), eds. Andrew S. Skinner and R.H. Campbell. The metaphore of an invisible hand occurs also in Smith’s other writing – “The Theory of Moral Sentiments”.

<sup>7</sup> Bernard Mandeville: “The Fable of The Bees: or, Private Vices, Public Benefits”.

In conclusion, Adam Smith's "invisible hand" metaphor is a first well-developed articulation of the idea of a self-adjusting market in the history of economic thought. It also provides firm arguments for laissez-faire economic policy recommendations.

## 1.2 JEAN BAPTISTE SAY AND THE LAW OF MARKETS

Although the so-called Law of the Markets" was largely accepted by almost all Classical economists<sup>8</sup> (with notable exceptions of Thomas Robert Malthus and Karl Marx), it is today most often associated with the name of a French economist and businessman Jean-Baptiste Say (1767–1832).

Say's own formulation of the law ("*loi des débouchés*" in French) can be found in "*Traité d'économie politique*", where he stated that "products are paid for with products"<sup>9</sup>, and in his sizeable exchange of letters with Malthus ("Produce opens a vent for produce"<sup>10</sup>). According to William Baumol we can distinguish two main variants of "Say's Law" :

(1) Say's Identity - "is the assertion that no one ever wants to hold money for any significant amount of time, so that, as a result, every offer (supply) of a quantity of goods automatically constitutes a demand for a bundle of some other items of equal market value"<sup>11</sup>.

(2) Say's Equality - "admits the possibility of (brief) periods of disequilibrium during which the total demand for goods may fall short of the total supply, but maintains that there exist reliable equilibrating forces that must soon bring the two together"<sup>12</sup>.

Say's Identity is based on what Paul Davidson called "the neutral money axiom"<sup>13</sup> - the idea that economy works as if it were a barter economy. In this vision the unique function of money is to facilitate the exchange between economic agents. Money has an exchange value but no utility for itself ("we do not consume money", as Say puts it) and therefore no rational

<sup>8</sup> Sowell, T. 1994. *Classical Economics Reconsidered*, Princeton University Press, Princeton, N.J.p.39

<sup>9</sup> Say, Jean-Baptiste. [1803] 1971. *A Treatise on Political Economy: or the Production, Distribution and Consumption of Wealth*. New York: Augustus M. Kelley, p. 153.

<sup>10</sup> Say, Jean-Baptiste, Letters to Thomas Robert Malthus on Political Economy and Stagnation of Commerce, London, George Harding's Bookshop, 1936, p.3.

<sup>11</sup> Baumol, W. J. 1977. "Say's (at Least) Eight Laws, or What Say and James Mill May Really Have Meant," *Economica*, Vol. 44, No. 174 (May, 1977), pp. 145-161

<sup>12</sup> Idem.

<sup>13</sup> Davidson, P. 2002. *Financial Markets, Money, and the Real World*, Edward Elgar, Cheltenham, page 19.

agent will decide to hoard it. All kinds of incomes (wages, profits and rents) will be immediately spent on purchase of goods and services. I will elaborate this point in the section devoted to Keynes's ideas.

Say's Equality is a direct consequence of the model of economy where the function of money is merely a "neutral veil", that is as a means of facilitating exchange. If everyone produces only in order to exchange his production for someone else's production, the possibility of a slump needs to be ruled out. Market mechanisms will ensure that aggregate supply will always equal aggregate demand.

Although Say (and other classical economist) admitted the possibility of overproduction in a particular market, he strongly opposed the idea that there can be a general glut of commodities. Steven Keen characterised the Pre-Keynesian economic theory as follows : "[sc. before Keynes] mainstream economics did not believe there were any intractable macroeconomic problems. Individual markets might be out of equilibrium at any one time – and this could include the market for labour or the market for money – but the overall economy, the sum of all those individual markets, was bound to be balanced"<sup>14</sup>.

The conclusion that we can draw from Say's law of the markets is that the market economy is self-equilibrating (in the long run at least) and recessions ("general glut") are impossible. For instance, in the classical labour market model the possibility of long-term involuntary unemployment is excluded. Even when temporary excess of working force occurs, it will be brought back to the equilibrium position by the price mechanism. If only workers accepted lower wages, the demand and supply for labour would determine the wage rate at which the market would be cleared of all excess of labour power.

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<sup>14</sup> Keen, S. 2001. *Debunking Economics: The Naked Emperor of the Social Sciences*, Zed Books, London and New York., page 210.

### 1.3 JOHN BATES CLARK AND THE MARGINAL THEORY OF DISTRIBUTION

If one would search for the exemplification of the Kuhnian paradigm shifts in the economic science, then the early 1870s constitute the perfect case of “replacing one conceptual world view by another”. The so-called Marginal Revolution is usually associated with the works of William Stanley Jevons (1835 –1882), Carl Menger (1840 –1921), Alfred Marshall (1842-1924), Léon Walras (1834 –1910) and, to a lesser degree, John Bates Clark (1847 –1938). In spite of significant differences in their approaches, those thinkers are considered as precursors of the Marginalist theory. By replacing the labour theory of value (LTV) with the subjective theory of value (STV) and by introducing the analytical notion of marginal utility, those economists radically break with the tradition of classical economics.

In this section I will take a closer look at the work of J.B Clark, and to be more specific, at his “marginal productivity theory of distribution”, since it constitutes to this day (however in a much more rigorously mathematical form) a fundament of the neoclassical labour market model.

J.B Clark presented his view on income distribution in a most developed way, in his work “The Distribution of Wealth: A Theory of Wages, Interest and Profits”. Clark’s aim was to explain firms’ labour-hiring decisions and prices of the input. Simply put, the marginal theory of distribution states that an owner of any factor of production (i.e. input = capital, labour and land) receives income that is equal to his marginal product.

Clark starts with the assumption of interchangeability of the factors of production, which means that they can be substituted for another<sup>15</sup>. According to Clark we can measure the marginal product of labour ( $MP_L$ ) by determining the increase in the total output of the firm by hiring one additional worker and by holding other factors of production constant.

Under the assumption in a perfectly competitive labour market we will observe diminishing marginal productivity of each additional worker – each newly employed worker will add to production less than his predecessor. Now if we multiply the marginal product of labour by

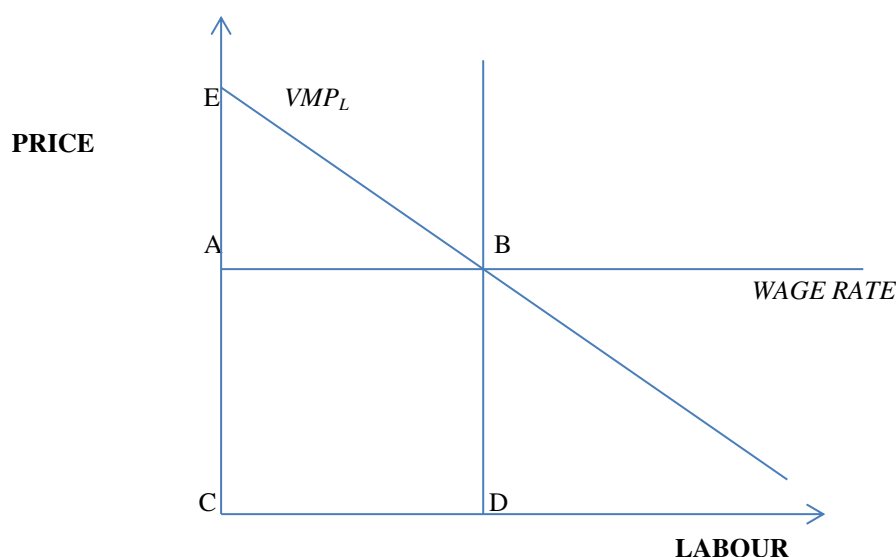
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<sup>15</sup> The theory is based on a number of other assumptions : perfect competition, all factors are identical, perfectly mobile, there are no idle resources (full employment), etc.



the selling price of the product per unit we will obtain the *value of the marginal product of labour* ( $VMP_L$ ).

As I mentioned before, one of the crucial assumptions in Clark's theory is the perfect competition. Among other things it means that firms are price takers, not price makers, which in the case of labour market means that a wage rate is determined exogenously. In such environment, a cost-minimising firm will hire new workers up to the point when the value of marginal product of labour is equal to the wage rate<sup>16</sup>.



From the above graph we can see that  $VMP_L$  constitutes individual firms' demand for labour. By adding the demands curves of all firms we are able to determine the aggregate demand for labour in the whole economy. The rectangle ABCD represents total wages paid by the firm (labour hours multiplied by the wage rate), and the triangle ABE represents the residual – that is the income of the owner of capital (profit). Because in Clark's approach factors of production are perfectly substitutable, by holding the labour constant we can derive the marginal product of capital ( $MP_K$ ).

As we can see in the neoclassical theory, the income distribution is determined solely by the productivity: each factor of production is rewarded proportionally to its contribution to the

<sup>16</sup> Workers in a given firm are paid the value of the marginal product of the last worker, not their own.

output. As Clark himself put it in the preface to his opus magnum : *“It is the purpose of this work to show that the distribution of the income of society is controlled by a natural law, and that this law, if it worked without friction, would give to every agent of production the amount of wealth which that agent creates. (...) So far as it is not obstructed, it assigns to everyone what he has specifically created”*<sup>17</sup>.

In Clark’s theory the level of employment is ultimately decided by the firms’ demand for the labour, which is, in turn, determined by the marginal product of labour. If there are no external-to-market forces that would set the wage rate on an artificially high level<sup>18</sup>, the intersecting downward-sloping demand curve and the upward sloping supply curve for labour would determine the market clearing price (equilibrium price). Labour market would be cleared, which means that quantity of labour demanded and labour supplied would be perfectly equal, and therefore involuntary unemployment would be impossible.

#### **1.4 CONCLUSION**

Writings of the economic thinkers discussed above constitute three components of the Pre-Keynesian theory of labour market, that was later synthesized by Arthur C. Pigou (1877-1959) in his works “Unemployment” and “The Theory of Unemployment”.

Adam Smith’s metaphor of the invisible hand that supposedly guides the behaviour of the market participants, provides arguments for the self-equilibrating markets and assures the most efficient allocation of resources (especially of labour force). Say’s Law of the market guarantees that the “general glut” in the market is impossible because “demand in aggregate was made up of supplies in aggregate”<sup>19</sup>. A potential “glut” (i.e. excess of supply over demand) in a market for a particular commodity would be quickly eliminated by the free market mechanism. J.B Clark’s marginal theory of income distribution explains the hiring decisions of cost-minimising firms: in a competitive environment firms will hire new workers up to the point when the value of the labour marginal product ( $VMP_L$ ) equals the wage rate. If

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<sup>17</sup> John Bates Clark : The Distribution of Wealth, New York : Augustus M. Kelly 1965, page 101.

<sup>18</sup> Like minimum wage legislation, collective bargaining or state demand management measures.

<sup>19</sup> Kates, S. 2002. “Economic Management and the Keynesian Revolution: The Policy Consequences of the Disappearance of Say’s Law,” International Journal of Applied Economics and Econometrics 10.3: 463–479.

for some reason the wages are fixed artificially high (i.e. higher than the  $VMP_L$ ), unemployment will result.

This approach to the problem of unemployment implies some obvious prescriptions for state economic policies. If the forces on the labour market naturally strive to economic equilibrium (market clearing wage), then the state's unique task is to protect this "natural" market mechanism from any external factors that could disrupt its functioning. Firstly, the state should not intervene between worker and employer in wage negotiations by fixing the minimum wage. Secondly, the state should not let the organised labour set wages on the level that could limit the employment. This can be achieved, for example, by creating labor relations that do not favour unions and by various "union busting" policies. Lastly, labour law should be flexible enough to allow employers to rapidly increase or decrease the level of employment according to the current demand for labour.

It should not be a surprise that in this classical framework, the only remedy for the unemployment problem was to cut the wages. As Paul Sweezy put it in his review of A. Pigou "Theory of Unemployment" : *"apart from frictional obstructions unemployment would be nonexistent if it were not for the fact that wage-earners habitually stipulate for a rate of wages higher than the 'equilibrium' level"*<sup>20</sup>.

## 2. KEYNESIAN REVOLUTION

Worldwide economic crises that started in 1929 and lasted until the late 1930s (The Great Depression) posed a major challenge to traditional economics. Especially the persistent unemployment could not be explained in the theoretical framework of the classical orthodoxy. For instance, in the United States unemployment rose up to 25% of workforce, oscillated around 15 during the whole 1930s and got back to its pre-1929 level only after 1941, when the US joined World War 2.

As for the causes of the Great Depression, it is important to notice that there was never a scientific consensus among the economists and different theoretical explanations were proposed.

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<sup>20</sup> Sweezy, P. (1934), "Professor Pigou's Theory of Unemployment," The Journal of Political Economy, 42, 6, (December), page 807.

The economists working in the tradition of Austrian economics developed the so-called Austrian Business Cycle Theory (ABCT)<sup>21</sup>, where emphasis is put on the negative consequences of keeping the interests rate artificially low for an extended period of time by the central bank. Marxist economists put stress on the internal contradictions of the capitalist mode of production that are inevitably leading to periodic crises – however, they dissent profoundly on the direct trigger of those crises<sup>22</sup>. Irving Fisher in his 1933 article in “Econometrica”<sup>23</sup> developed the theory of “debt deflation” where he claimed that the main cause of the 1929 Depression was the over-indebtedness of private sector and an asset bubble, fueled by borrowed money. In the context of the 2008 subprime crises there was some revival of interest in works of a Post-Keynesian economist - Hyman Minsky and his “Financial Instability Hypothesis”<sup>24</sup>.

By far however, the most intellectually influential was the theory developed by a British economist John Maynard Keynes<sup>25</sup>. His ideas, developed in *The General Theory of Employment, Interest and Money* and published in 1936, constituted a major challenge to the classical economics theory. Keynes was perfectly aware that his work was standing in a sharp contrast with some core beliefs of the economics orthodoxy. In a letter to George Bernard Shaw, Keynes wrote : “*I believe myself to be writing a book on economic theory which will largely revolutionize, not I suppose at once but in the course of the next ten years – the way*

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<sup>21</sup> The ABCT is not a uniform theory and there are different versions of it . For instance there are quite important differences between Ludwig von Mises’s version, as developed in “The Theory of Money and Credit”, and Friedrich Hayek’s version elaborated in his “Prices and Production”.

<sup>22</sup> The main Marxist theories of the crises include : the overproduction theory, the profit squeeze theory, the underconsumption theory and tendency of falling rate of profit. For the detailed overview of those theories, see Shaikh A., “An Introduction to the History of Crisis Theories”, in U.S. Capitalism in crisis, Union for Radical Political Economics, New York.

<sup>23</sup> I. Fisher : “The Debt-Deflation Theory of Great Depressions,” *Econometrica*, 1933. 1(4), pp. 337–357

<sup>24</sup> Australian economist Steven Keen is probably the most committed contemporary proponent of Minsky’s FIH.

<sup>25</sup> Many historians of economic thought claim that a Polish economist Michał Kalecki developed the theory of effective demand before Keynes. As Joan Robinson put it : “Michał Kalecki’s claim to priority of publication is indisputable. With proper scholarly dignity (which, however, is unfortunately rather rare among scholars) he never mentioned this fact. And, indeed, except for the authors concerned, it is not particularly interesting to know who first got into print. The interesting thing is that two thinkers, from completely different political and intellectual starting points, should come to the same conclusion. For us in Cambridge it was a great comfort.” (J. Robinson: “Kalecki and Keynes”. *Problems of Economic Dynamics and Planning: Essays in Honour of Michał Kalecki*. Polish Scientific Publishers, 1966, p. 337)

*the world thinks about economic problems ... I don't merely hope what I say, in my own mind I'm quite sure*"<sup>26</sup>.

According to professors David Colander and Harry H. Landreth we can distinguish three components in the so-called Keynesian Revolution : the revolution in economic policy, the revolution in textbooks and the revolution in economic theory<sup>27</sup>. I will discuss some aspects of the economic policies inspired by Keynes in the second part of my work. In the following sections I will deal with Keynes's major contributions to economic theory. The issue of the "revolution in economics textbooks" will be briefly presented in the end of this chapter.

Keynes's analysis developed in the "General Theory" was intended first and foremost to analyse the reasons for the periodic depressions in capitalist economy. Keynes's aim was to deliver a coherent theoretical explanation for the prolonged periods of massive unemployment and idle productive capacities in a supposedly self-adjusting market. Let us take a closer look at conceptual building blocks of his analysis.

## 2.1 KEYNESIAN UNCERTAINTY

We saw earlier that the entry point of Adam Smith's theory is his particular vision of human nature. Smith's *homo oeconomicus* ("economic man") is a self-interested, perfectly rational individual driven solely by his hedonistic calculus and looking after their own well-being. Later economists delivered highly sophisticated mathematical models based on this assumption and the mainstream economic theory today<sup>28</sup> is built upon this premise about micro-level behaviour (microfoundations).

For the concept of a rational and utility-maximising individual to have any explanatory power, it needs an auxiliary assumption of perfect information. For the agents to make a rational choice, they need all the relevant information about possible choices and the consequences of those choices. Without this assumption, individuals will not be able to calculate, what the most "rational" thing to do is.

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<sup>26</sup> Keynes, J.M (1973). Donald Moggeridge, ed. The Collected Writings of J. M. Keynes XIV. London: Macmillan for the Royal Economic Society. pp. 492–493.

<sup>27</sup> Colander, David C.; Landreth, Harry H. The Coming of Keynesianism to America: Conversation With the Founders of Keynesian Economics, 1997 Edward Elgar Pub.p. 137

<sup>28</sup> Like the neoclassical „Rational choice theory“.

Keynes was the first economic thinker to deliver devastating critique of those assumptions of economic orthodoxy<sup>29</sup>. The crucial concept for Keynes's theory is the fundamental uncertainty that accompanies economic actors in their decision making process. He carefully distinguished between economic risk (that is measurable) and uncertainty (that we can't measure)<sup>30</sup>. By risk Keynes meant the situations in which numerical value can be assigned to various possible outcomes. In the case of fundamental uncertainty, the economic agents are not able to calculate the probability of the future events.

This distinction between risk and uncertainty is so important for Keynes's theory that I found it useful to quote him at length : *"By 'uncertain' knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty; nor is the prospect of a Victory bond being drawn. Or, again, the expectation of life is only slightly uncertain. Even the weather is only moderately uncertain. The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention, or the position of private wealthowners in the social system in 1970. About these matters there is no scientific basis on which to form any calculable probability whatever"*<sup>31</sup>.

Let us note that in this passage Keynes not only defines uncertainty, but also introduces the concept of degrees of uncertainty - the weather is only moderately uncertain as opposed to the prospect of a European war. For instance J. Barkley Rosser claims that we can distinguish four degrees of uncertainty:

- “(i) ... there are no probabilities at all (fundamental uncertainty),
- (ii) ... there may be some partial ordering of probable events but no cardinal numbers can be placed on them,

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<sup>29</sup> But not the last one. Herbert A. Simon, American economist and psychologist, also criticises neoclassical theories of “rational” decision-making. He developed the theory of “bounded rationality” that today is the central theme in the field of behavioural economics. A similar theory, independently of Keynes, was developed by an American economist Frank Knight (Knight, F. H. 1921. Risk, Uncertainty and Profit, Houghton Mifflin, Boston)

<sup>30</sup> The distinction between “risk” and “uncertainty” was first introduced in his “A Treatise on Probability” (1921) and later developed in “The General Theory of Employment, Interest and Money” (1936).

<sup>31</sup> Keynes, “The General Theory of Employment,” Quarterly Journal of Economics 51 (1937), p. 213-214.

- (iii) ... there may be numbers but they cannot be discovered for some reason, and
- (iv) ... there may be numbers but they are difficult to discover”<sup>32</sup>.

Partisans of this approach claim that the concept of degree of uncertainty is an important element in the Post-Keynesian theory of the decision making<sup>33</sup>. However, not all followers of Keynes recognise the need to distinguish degrees of uncertainty<sup>34</sup>.

Independently of the result of this discussion, the fact that uncertainty is the core of Keynes's theory is undeniable. As Hyman Minsky wrote, “*Keynes without uncertainty is something like Hamlet without the Prince*”<sup>35</sup>. But economic actors, primarily investors, need to make decisions even when they are facing the fundamental uncertainty. Humans are driven by animal spirits, that is a “spontaneous urge to action rather than inaction”.

In order to cope with the uncertainty, economic agents developed a series of conventions that help them to make the decisions even without all the necessary information about the possible outcomes of their actions. Those conventions are a sort of heuristic techniques or rules of thumb that are used to manage the fundamental uncertainty. Keynes himself enumerates three such conventions :

*“(1) We assume that the present is a much more serviceable guide to the future than a candid examination of past experiences would show it to have been hitherto. In other words we largely ignore the prospect of future changes about the actual character of which we know nothing.*

*(2) We assume that the existing state of opinion as expressed in prices and the character of existing output is based on a correct summing up of future prospects, so that we can accept it as such unless and until something new and relevant comes in to the picture.*

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<sup>32</sup> Barkley Rosser, J. 2001. “Alternative Keynesian and Post Keynesian Perspectives on Uncertainty and Expectations,” *Journal of Post Keynesian Economics* 23.4: 545–566.

<sup>33</sup> Crocco, M. 2002. “The Concept of Degrees of Uncertainty in Keynes, Shackle, and Davidson,” *Nova Economia* 12.2: 11–28.

<sup>34</sup> Advocates of this interpretation include D. Dequech (“Uncertainty in a Strong Sense: Meaning and Sources,” *Economic Issues* 2.2: 21–43) and J. Runde. (“Keynesian uncertainty and the weight of arguments,” *Economics and Philosophy* 6.2: 275–292). On the other hand Paul Davidson does not recognise degrees of uncertainty (DAVIDSON, P. *Uncertainty in Economics*. In: DOW, S.; HILLARD, J. (Eds.) *Keynes, knowledge and uncertainty*. Aldershot: Edward Elgar, 1995. p. 77-106)

<sup>35</sup> Minsky, Hyman P. *John Maynard Keynes*. New York: Columbia University Press, 1975. P.57

*(3) Knowing that our own individual judgment is worthless, we endeavour to fall back on the judgment of the rest of the world which is perhaps better informed. That is, we endeavour to conform with the behaviour of the majority on average. The psychology of a society of individuals each of whom is endeavouring to copy the others leads to what we may strictly term a conventional judgment.<sup>36</sup>”*

Conventions, of course, do not eliminate uncertainty but help to reduce it – here we can see the usefulness of the concept of degrees of uncertainty. If that is the case, the investment decisions of the firms are necessarily based on their subjective expectations about many futures variables : the general state of the national economy, prices of commodities, consumer preferences, etc... In other words, there is a necessary speculative element in firms’ decision making process.

In Keynesian economics the expectations are subjective and not ‘rational’ in the sense that they depend much more on an individual’s psychology than on their rational calculations. This explains why the capitalist economies are marked by intersecting of booms and busts – periods of prolonged pessimism are followed by investors overconfidence about profitability of their actions. Investment decisions are volatile because they are not based on cold, rational calculations, but rather on mass psychology of investors.

## **2.2 KEYNES’S CRITIQUE OF SAY’S LAW**

The concept of fundamental uncertainty plays an important role in Keynes’s critique of Say’s law of the market. We saw earlier in the section 1.2 that Say (and most of the classical and neoclassical economists with him) analysed the functioning capitalist economy as if it was a barter economy. In this vision a supply of goods and services equals the demand for those goods and services. Say admitted a possibility of glut in a particular market, but for an economy as a whole total production would always equal total income. The only role of money is to overcome the difficulties of direct barter and facilitate the exchange between producers and consumers.

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<sup>36</sup> Keynes, John Maynard (1937) *The General Theory of Employment*. Quarterly Journal of Economics, Vol. 51, N° 02.P. 114.



Keynes developed what he himself called a “monetary theory of production”<sup>37</sup>, where money is not just a “natural veil”, but where it plays a very explicit role. He maintained that by assuming the “neutrality of money”, the classical economists are unable to deliver a satisfactory explanation of the persistent unemployment and recurring economic crises (“it has assumed away the very matter under investigation”<sup>38</sup>).

For Keynes a real-life capitalist economy ( i.e. monetary economy) is one where “*money plays a part of its own and affects motives and decisions and is, in short, one of operative factors in the situation, so that the course of events cannot be predicted, either in the long period or in the short, without a knowledge of the behavior of money between the first state and the last*”<sup>39</sup>.

In chapter 13 and 15 of “The General Theory” he identified and discussed three motives for which money is demanded :

1. The transaction motive – “*the need of cash for current transaction of personal and business exchanges*”<sup>40</sup>. This is the amount of money that firms and consumers need in order to meet their day-to-day expenses. Keynes distinguished two further sub-categories of this motive: income motive (individuals) and business motive (firms). The logic behind them is fairly the same – money is demanded in order to bridge the times interval between the moment when cash is needed and when it is available.
2. The precautionary motive – “*the desire for security as to the future cash equivalent of a certain proportion of total resources*”<sup>41</sup>. Money can be stored by individuals as a kind of “emergency fund” that can be used in case of unforeseeable and unexpected expenses (unemployment, economic crises, business default, etc...)
3. The speculative motive – “*the object of securing profit from knowing better than the market what the future will bring forth*”<sup>42</sup>. Keynes highlights here the desire to keep

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<sup>37</sup> Keynes, J.M (1973), „A monetary theory of production”, in The General Theory and After. Part I, Preparation, London: Macmillan, vol. 13 of The collected Writings of John Maynard Keynes, p. 408-11.

<sup>38</sup> Idem. p.410-411

<sup>39</sup> Idem.p.408-409

<sup>40</sup> Keynes, J. M. *The General Theory of Employment, Interest, and Money*, A Harvest Book, 1964, p.170

<sup>41</sup> Idem. p. 170

<sup>42</sup> Idem. p. 170

money to take advantage of future changes in the rate of interest or bond prices (there is an inverse relationship between interest rates and the market value of bonds). To put it crudely: “to play the market”. If people expect the future interest rates to be lower than the current ones they will buy more bonds (or other securities), and therefore reduce their stock of money. If, however, they expect the opposite (the raising of the future rates), they will sell the bonds and the demand for money will increase.

The first two motives help individuals to deal with uncertainty. Keynes points out that strength of transaction and the precautionary motive depend on the “*cheapness and reliability of methods of obtaining cash*”<sup>43</sup>. If it is relatively easy to obtain cash when it is actually required (by all kinds of temporary borrowing, for instance), then motives to hold the money would be weaker.

At this point we can clearly see the major point of divergence between Keynes and classical economists. Because of the three motives enumerated above, economic agents have a liquidity preference, i.e. demand for money (considered as liquidity). Money is not only a medium of exchange that facilitates the exchange of goods and services. For Keynes and the adherents of the Post-Keynesian school of thought money has a utility on its own : “*In an uncertain world, the possession of money and other nonproducible liquid assets provides utility by protecting the holder from fear of being unable to meet future liabilities*”<sup>44</sup>.

One of the key concepts of the classical economics (and Say’s Law) is the so-called Gross Substitution Axiom<sup>45</sup>, that is the assumption that any good is a substitute for any other good. If the price for one good increases, consumers will buy more of cheaper substitutes and less of this expensive good, but in aggregate, the demand will be the same because the same amount of money will be spent<sup>46</sup>.

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<sup>43</sup> Idem. P.196

<sup>44</sup> Davidson, P. 2003. “Keynes’ General Theory,” in J. E. King, Elgar Companion to Post Keynesian Economics, Edward Elgar Publishing, Cheltenham, UK and Northampton, MA. 229–237.

<sup>45</sup> Paul Davidson identified three key assumptions of the classical and neoclassical theory :

- (1) the neutral money axiom
- (2) the gross substitution axiom, and
- (3) the ergodic axiom.

<sup>46</sup> P.Davidson, *Keynes and Money* in :Arestis P., Sawyer M., A Handbook of Alternative Monetary Economics, Edward Elgar, 2006, p.146.

However elegant in theory, the gross substitution axiom does not apply to real life monetary economy. As Keynes noticed in chapter 17 of “The General Theory”, money (and other liquid financial assets<sup>47</sup>) has two special properties :

1. Money has zero or very small elasticity of production - if the liquidity preferences of economic agents increase (their demand for money rises), private firms cannot just start to “produce” more money (as they would do in case of rising demand for any other good). Or as Keynes put it *“Money, that is to say, cannot be readily produced;—labour cannot be turned on at will by entrepreneurs to produce money in increasing quantities as its price rises in terms of the wage-unit”*<sup>48</sup>.
2. Money has zero or very small elasticity of substitution with producible goods and services. In P. Davidson’s formulation it means that *“Any increase in demand for liquidity (that is, a demand for nonproducible liquid financial assets to be held as a store of value), and the resulting changes in relative prices between nonproducible liquid assets and the products of industry will not divert this increase in demand for nonproducible liquid assets into a demand for producible goods and/or services”*<sup>49</sup>.

To conclude, let us repeat the logic behind Keynes’s repudiation of Say’s Law. Contrary to the (neo) classical belief, money is not neutral because it has a utility on its own - protection against fundamental uncertainty. In periods of diminished expectations about possibilities of profitable investments, wealth owners’ demand for money (their liquidity preference) will increase. Money, however, has special properties (zero or small elasticity of substitution and production) that invalid the gross substitution axiom and make it invalid in a real life monetary economy. The increased liquidity preference will not only not create new jobs (zero elasticity of production), but will also decrease demand for producible goods, since hoarded money will not be invested in production of producible commodities (goods and services).

### 2.3 LIQUIDITY – THE PREFERENCE THEORY OF INTERESTS RATES

Keynes rejected the neoclassical theory of interest rate, also known as the loanable-funds theory of interest, which was initially developed by a Swedish economist Knut Wicksell in

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<sup>47</sup> Assets have various degrees of liquidity. Money is the most liquid one.

<sup>48</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.234

<sup>49</sup> Davidson, P. 2002. Financial Markets, Money, and the Real World, Edward Elgar, Cheltenham.P.44

his “Interest and Prices” (published in 1898). The loanable funds market relate the individuals who want to save (lenders) with firms that want to invest (borrowers). In this theory the interest rate is the market clearing price in the loanable funds market. In other words, the rate of interest is the price that equates the demand for and supply of loanable funds.

Keynes’s theory of interest rate is a consequence of this vision of the role of money in “monetary economy”<sup>50</sup>. Keynes defines the interest as a “*reward for parting with liquidity, (...) a measure of the unwillingness of those who possess money to part with their liquid control over it*”<sup>51</sup>. The rate of interest is not equalizing the savings and investments (the supply and demand of loanable funds) but the stock of cash and the demand for cash.

In section 2.2 we saw that, because of the speculative motive, the demand for money (liquidity preference) will increase every time the interest rate falls, and it will decline when the interest rate is high (in relation to what is considered by market agents as a “normal” interest rate). Given the supply of money constant (determined by the central monetary authority<sup>52</sup>), the interest rate can be set at a level where savings excess investments. If these situations persist, as they do in periods of pessimistic expectations about possibility of profitable investments, the economic system will suffer from insufficient aggregate demand.

## 2.4 THE PRINCIPLE OF EFFECTIVE DEMAND

The culminating point of Keynes’s argumentation in “The General Theory” is his principle of effective demand. In short, that principle states that the level of output and employment in economy is determined by the aggregate demand.

We can distinguish two components of the aggregate demand, namely the consumption demand of households and the investment demands of firms. Investment decisions of firms are a more unstable element because they are influenced by expectations regarding prospective yields from capital<sup>53</sup>. Expectations, in turn, are not objective and rational, but

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<sup>50</sup> In barter economy money is a veil. In monetary economy production starts with money (finance) and ends with money (monetary profit).

<sup>51</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.166-67

<sup>52</sup> Today’s Post –Keynesians (contrary to Keynes) embrace the endogenous money theory.

<sup>53</sup> To be more precise, the investment function (or as Keynes calls it, “inducement to invest”) depends on the marginal efficiency of capital (MEC) and the rate of interest. MEC, in turn, is determined by the prospective

rather subjective and based on crowd psychology of the business community. In other words, uncertainty explains why investment decisions of the investors are volatile.

The second component of the aggregate demand, the consumption demand, is a more steady element of demand because it is based on habits and customs. For Keynes the spending behaviour of households was the function of the level of income. The relationship between the change in the level of income and the resulting change in consumption he called “marginal propensity to consume” (MPC). The relationship between the change in the level of income and the resulting change in saving Keynes called “marginal propensity to save” (MPS).

Keynes formulated the so-called Fundamental Psychological Law (or “Psychological law of consumption”) which states that marginal propensity to consume (MPC)<sup>54</sup> and “marginal propensity to save” (MPS)<sup>55</sup> are greater than zero (0) but less than one(1)  $MPC + MPS = 1$ . It means that every time income of households increases, their consumption spending will increase as well but by a smaller amount (conversely, when income decreases, also the spending will decrease but by a smaller amount). The higher the income of the given household the higher will be its marginal propensity to save.

Given the MPC less than 1, there will be a widening gap between income and consumption of the households. In order to sustain proper functioning of circular flow of income and expenditures in the economy, this should be filled by investment. But investments, since they depend on subjective expectations, are highly volatile.

We saw before that in Keynes’s theoretical framework, the rate of interest equalises the supply of and demand for money. Demand for money (liquidity preference) can increase in periods of depressed expectation about possibility of profitable investments (both for speculative and precautionary motives). As Robert Skidelsky noticed, “*Keynes’s novelty was to treat saving as a subtraction from consumption, but not as a fund for investment*”<sup>56</sup>. In

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yields of capital assets, and the supply prices or the replacement costs of these assets. In other words, MEC is an expected rate of returns over the cost of buying capital goods

<sup>54</sup> Marginal propensity to consume (MPC) is equal to  $\Delta C / \Delta Y$ , where  $\Delta C$  is the change in consumption, and  $\Delta Y$  is the change in income.

<sup>55</sup> Marginal propensity to save (MPS) is equal to  $\Delta S / \Delta Y$ , where  $\Delta S$  is the change in saving, and  $\Delta Y$  is the change in income.

<sup>56</sup> Skidelsky R. „Keynes: The Return of the Master”, Public Affairs, 2010, p.87.

other words, and contrary to the neoclassical belief, saved money is not automatically transformed into new investments.

In recession, according to Keynes, the first reaction of firms will not be to lower the prices, but to lay off the workers. To put it differently, quantities (number of workers employed), not prices (level of wage), will adjust. Although laying off the workers can be seen as rational from the point of view of a single firm, this will even further contract the aggregate demand in scale of the whole economy. In order to liquidate the excess of supply over the demand firms will be forced to continue to lower the level of production. This vicious circle will continue up to the point where the economy reaches the point of “unemployment equilibrium”, where some amount of labour force and productive capacities of society stays idle. It is worth noting that Keynes believed that this “unemployment equilibrium”<sup>57</sup> was not exceptional, but a rather normal state of affairs in modern capitalist economies : *“our actual experience ... [sc. is] that we oscillate, avoiding the gravest extremes of fluctuation in employment and in prices in both directions, round an intermediate position appreciably below full employment and appreciably above the minimum employment a decline below which would endanger life”*<sup>58</sup>.

Since the term „equilibrium” has a specific meaning in economic science, it is worth noting what Keynes actually meant by „unemployment equilibrium”. According to A. Asimakopulos: *„All, then, that Keynes means by the statement that the system may settle down to a position of “unemployment equilibrium” is that the automatic workings of the system will not restore the system to a position of full-employment equilibrium. He does not mean “equilibrium” in the usual sense of the term that nothing tends to change in the system’. Leijonhufvud also interprets Keynes’s ‘unemployment equilibrium’ as implying the weakness of the forces ‘tending to bring the system back to full employment’”*<sup>59</sup>.

When money is hoarded and there is not enough purchasing power injected into the economy via investments, the economy will face the problem of excess supply (i.e. insufficient demand). The firms will find themselves with stock of unsold commodities and, in order to minimise losses, they will have to limit the level of output in the next production period. In

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<sup>57</sup> Asimakopulos, A. 1991. Keynes’s General Theory and Accumulation, Cambridge University Press, Cambridge. P.27

<sup>58</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.229

<sup>59</sup> Asimakopulos, A. 1991. Keynes’s General Theory and Accumulation, Cambridge University Press, Cambridge. P.27

the classical theory, such a situation would simply result in market mechanisms finding a new point of equilibrium (with a lower wage rate) between the supply and the demand for labour.

But Keynes rejected this assumption of automatic adjustment – he claimed that it is a fundamental mistake to assume that wages can be reduced without affecting the aggregate effective demand : *“There is therefore no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment; (...) The economic system cannot be made self-adjusting along these lines”*. Those who think that perfectly flexible prices in a particular firm or a particular industry would bring back full employment on the level of the whole economy, commit the fallacy of composition - something which is true for one segment of the economy is not necessarily true for the economy as a whole.

## **2.5 CONCLUSION: POSSIBILITY OF INVOLUNTARY UNEMPLOYMENT**

Mainstream economic models before Keynes did not pay considerable theoretical attention to the phenomenon of unemployment. In the theoretical world of classical economists Smith’s “invisible hand” assured the most effective distribution of resources, Say’s Law of the market guaranteed that there will be no “general glut” in the economy, and the marginal theory of distribution “proved” that owners of every factor of production are rewarded proportionally to their contribution to production. In this world the problem of unemployment was simply ruled out.

Confronted with prolonged periods of unemployment in the 30s, classical economists found themselves unable to provide a satisfactory theoretical explanation of why market is not adjusting to the point of full employment. In spite of obvious shortages, the classical theory of labour market was not abandoned by the economists. After the initial shock, they concluded that market is not to blame and agreed that the source of the problem should be searched in exogenous factors (such as trade unions and collective bargaining, minimum wage legislation and overregulated labour market).

Keynes’s lasting contribution to economic theory was to provide a theoretical explanation of the involuntary unemployment (known also as cyclical, deficient-demand, or Keynesian unemployment). In “The General Theory” he showed that in monetary economy, where

money provides protection against uncertainty, leakages from circular flow of income and expenditures are possible. Contrary to Say's Law, those leakages are not necessarily offset by the same amount of "injections", because investment decisions of firms are based on subjective expectations and therefore they are highly volatile.

In Keynes's view, the market mechanism is not a self-correcting mechanism that can move back to full employment equilibrium without some external stimulus. I will consider his economic policy recommendation in chapter 2.

### **3. THEORY OF UNEMPLOYMENT AFTER KEYNES**

In this section I will deal with development of the economic theory of labour market after publication of Keynes's "The General Theory of Employment, Interest, and Money".

In his opus magnum Keynes developed a theory that provided an alternative to the classical school of thought explanation of recurrent crises in capitalist economy and prolonged periods of unemployment. In "General Theory" he undermined, so far unchallenged, the most important dogmas of economic theory, such as Say's Law of the markets or the assumption of neutrality of money. The force of Keynes's argument and the resonance that his ideas gained in political circles, forced professional economists to take a stance towards his theory. In other words, after 1936 it was not possible to be an economist without having a clear opinion (positive or negative) about Keynes's theory.

Labelling schools of economic thought is always problematic and it is not easy to draw clear lines between them. Being aware of this problem and given the topic of this work, as the criterion of classification I adopted their attitude towards Keynes's theory. In the following part of this chapter I will briefly review three schools of thought that can be viewed, successively, as a development (Post-Keynesians), radical revision (Neo-Keynesian) and fundamental critique of Keynes's ideas (New Neoclassical synthesis)



### 3.1 POST-KEYNESIANS

The origins of the Post-Keynesian School, of Thought should be searched in the late 30s of the 20<sup>th</sup> century in the Cambridge University. As the most important pioneers of the school I should mention Joan Robinson, Geoff Harcourt and Nicholas Kaldor. There has been a considerable debate around the question of affiliation of Michał Kalecki and Pierro Sraffa to the Post-Keynesian school<sup>60</sup>. The prevalent view seems to include Sraffians (Neo-ricardians) and Kaleckians as a subgroup into the “broad tent” of Post Keynesianism, however this issue remains controversial<sup>61</sup>.

Post-Keynesian economists consider themselves as true heirs of Keynes and claim that their interpretation is the closest to the spirit of “The General Theory of Employment, Interest, and Money”. According to Marc Lavoie, the Post-Keynesian tradition is characterised by the following features that allow to clearly distinguish it from both mainstream economic and other heterodox schools. First two characteristics should be considered as essential: the remaining five as auxiliary and therefore not shared by all Post-Keynesian economists<sup>62</sup>:

1. The principle of effective demand – states that the level of output and employment in economy is demand-determined. Economy is not constrained by supply and investments are essentially independent of savings (investment causes savings, not the other way around), both in short run and in a long run.
2. Dynamic historical time – Joan Robinson stressed the need to differentiate the “logical time” from the “dynamic historical time”<sup>63</sup>. The mainstream economic models reduce time factor only to the logical time (there is only “then” and “after”) and compare one point of static equilibrium with another. The Post-Keynesians emphasise the need to take into consideration the periods of transition

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<sup>60</sup> Marc Lavoie, “Should Sraffian Economics be dropped out of the Post-Keynesian School?,” Paper prepared for the Conference at the University of Roma Tre, 2–4 December 2010.

<sup>61</sup> For an opposite view, see : King, J. E. 2012. “Post Keynesians and Others,” *Review of Political Economy* 24.2: 305–319.

<sup>62</sup> Lavoie, M., *Introduction to Post-Keynesian Economics*, Palgrave/Macmillan, 2006, p.12

<sup>63</sup> Robinson, J. (1974), “History versus Equilibrium”, *Thames Papers in Political Economy*, Thames Polytechnic, London. Reprinted in Joan Robinson (1979a), pp. 48-58. and Robinson, Joan. 1980. “Time in Economic Theory,” *Kyklos* 33.2: 219–229.

(time lags) between two points of equilibrium. By including the historical dynamic time, Post-Keynesian models are able to analyse the decision-making process of market agents in conditions of fundamental uncertainty and changes in productive structure of the economy. In other words, the new long run-position equilibrium is necessarily dependent on the short-period position.

3. Possible destabilising effects of price flexibility - in mainstream economics the mechanism of perfectly flexible prices is a device that will bring market for any commodity to equilibrium. For instance, hypothetical excess of supply on labour market would be instantly eliminated by lowering wages of workers. Post-Keynesians reject the idea that the wage reduction would always have beneficial results for the economy. On the contrary, radical wage cuts could plunge economy in even more severe recession because of the diminishment of the purchasing power of the workers.
4. The monetary production economy – in section 2 we have already seen that the role of money was a key point of Keynes's critique of Say's Law and classical economics. Post-Keynesians also follow Keynes's footsteps and replace the classical barter-exchange model with a monetary economy model where production starts and finishes with money. To use the Marxist terminology, economy is not in C-M-C but in M-C-M' circuit. Accordingly, Post-Keynesian economists highlight the role of debt, credit and banks in economic growth and in economic recessions.
5. Fundamental uncertainty – just like Keynes, Post-Keynesian economists stress the difference between risk and fundamental uncertainty. They are particularly interested in analysing the decision-making process of market agents in a world of uncertainty.
6. Post-Keynesian microeconomics – dismiss the neoclassical theory of consumer choice by rejecting its two fundamental premises: marginalism and decreasing marginal utility. Post-Keynesians point out that the so-called Law of Demand rule according to which, *ceteris paribus*, when the price of a good or service increases, consumer demand for the good or service will decrease (and vice versa) is fundamentally flawed. Firstly, there are categories of goods which simply do not

conform to the law of demand, like Giffen goods<sup>64</sup>, Veblen goods<sup>65</sup> or assets on speculative markets. Secondly, the concept of diminishing marginal utility, that underlines the law of demand, does not take into account the time factor and the change of consumer tastes that can occur when time passes<sup>66</sup>. Lastly, according to Steven Keen, by deriving a market demand curve from individual demand curves of consumers with “rational preferences”, the neoclassical economists commit fallacy of composition. Instead, the theory of consumer choice should be based on behavioural perspective and/or bounded rationality<sup>67</sup>.

7. Pluralistic approach to theorising – the Post-Keynesian theory derives inspiration from various thinkers (not necessarily economists), schools of thoughts and social sciences.

This brief overview allows us to agree with Robert Skidelsky’s opinion that “*Within the academic community, the post-Keynesian school of economists has remained closest to the spirit of Keynes’s General Theory*”<sup>68</sup>. Just like Keynes they emphasise the monetary character of the economy, the need of taking into account fundamental uncertainty, and reaffirm the principle of effective demand.

But Post-Keynesian economists had not limited themselves to defend and to develop Keynes’s ideas. In some regards their critique of the neoclassical theory went much further than that expressed on the pages of “The General Theory”. As we have seen, Keynes refuted Say’s Law and the idea that market is a self-adjusting system (“invisible hand”) but left intact the third component of the classical theory of labour market – the marginal theory of income distribution.

During the 1960s a theoretical debate between neo-classical economists from the Massachusetts Institute of Technology (Paul Samuelson, Robert Solow) and Post-Keynesians and Neo-Ricardian economists from the University of Cambridge (Joan Robinson, Piero

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<sup>64</sup> A good for which demand increases as the price increases, and falls when the price decreases. The Giffen goods are the cheapest source of searched resource, so when their price rises, people consume more of it by giving up consumption of luxury goods.

<sup>65</sup> Just like in case of Giffen goods, when the price of the Veblen good rises so will demand for it, but for other reasons. This category of goods is connected with the concept of “conspicuous consumption”, introduced by Thorstein Veblen in his “The Theory of the Leisure Class” (1899). Veblen goods are bought and consumed in order to publicly display economic power and social position of consumer (“snob” goods).

<sup>66</sup> Robinson, Joan. 1964. *Economic Philosophy*. Penguin, Harmondsworth. p 50

<sup>67</sup> Keen, Steve. 2011. *Debunking Economics: The Naked Emperor Dethroned?* (rev. and expanded edn). Zed Books, London and New York. P. 53

<sup>68</sup> Skidelsky R. „Keynes: The Return of the Master”, *Public Affairs*, 2010, p.42.

Sraffa, Luigi L. Pasinetti) took place – the so-called Capital Debate or Cambridge Capital Controversy. A detailed depiction of arguments of both sides is far beyond the scope of this work, but for our consideration it is noteworthy that the “Cambridge”<sup>69</sup> side of the debate demonstrated that neoclassical theories of production and distribution are not sound.

More precisely, the key concepts of these theories, i.e. the production function (equation that expresses the relationship between the quantities of productive factors used and the amount of product obtained) is deeply flawed. Essentially, those theories are based on assumption of measurability of capital, but as Sraffa proved it is impossible to aggregate the capital goods (capital goods are heterogeneous), and therefore we cannot determine marginal productivity of capital.

As Joan Robinson brilliantly put it: *“the production function has been a powerful instrument of miseducation. The student of economic theory is taught to write  $O = f(L, C)$ , where  $L$  is a quantity of labour,  $C$  a quantity of capital and  $O$  a rate of output of commodities. He is instructed to assume all workers alike, and to measure  $L$  in man-hours of labour; he is told something about the index-number problem involved in choosing a unit of output; and then he is hurried on to the next question, in the hope that he will forget to ask in what units  $C$  is measured. Before ever he does ask, he has become a professor, and so sloppy habits of thought are handed on from one generation to the next”*<sup>70</sup>.

The “Cambridge capital controversy” has a major theoretical implication for the neoclassical theory of labour market. If Sraffa’s criticism is sound and we cannot justify the rate of profit as reflecting marginal productivity of capital, then we also cannot explain the wage rate as reflecting the marginal productivity of labour, since it depends on the quantity of capital in use<sup>71</sup>. The whole marginal theory of income distribution that underpinned the neoclassical theory of unemployment and labour market seems to collapse.

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<sup>69</sup> Notably Piero Sraffa in his “Production of Commodities by Means of Commodities: Prelude to a Critique of Economic Theory”. Cambridge University Press, 1960.

<sup>70</sup> Robinson, Joan. 1953-54. “The Production Function and the Theory of Capital”, Review of Economic Studies, p.81

<sup>71</sup> Hunt E. K., Lautzenheiser M., : “History of Economic Thought: A Critical Perspective” , M.E. Sharpe, Third edition , p.438

Post-Keynesian economists also assert that labour is not an ordinary commodity, and therefore, the traditional tools of neoclassical analysis, i.e. the downward-sloping demand curve and the upward-sloping supply curve, are not appropriate to study labour market.

As Steven Keen pointed out, labour is an “inverted commodity” which means that unlike on other markets, “*supply decisions are made by consumers (households supplying labour), whereas labour demand decisions are made by producers (firms hiring labour)*”<sup>72</sup>. Also, since labour force is not produced for profit (unlike other commodities), it is perfectly possible that that supply curve in the labour market will “slope backwards”- showing falling supply as wages rise (a higher wage means that the total income will be the same even if somebody works fewer hours)<sup>73</sup>. The inverse situation is also possible: a falling wage can in fact increase the supply of labour (that will be the case of the household that wants to keep the same standard of life in spite of lower wages. In this situation another member of the family would have to enter the labour market).

In conclusion, the Post-Keynesian school not only popularised and developed Keynes’s theory, but also formulated much more radical critique of the economic orthodoxy vision of unemployment, than Keynes did. During the so-called Capital Debates they showed that the neoclassical theory of income distribution suffers from fundamental logical inconsistencies. But even more fundamentally, Post-Keynesians claim that, given the specific features of the labour force as a commodity, traditional tools of microeconomics (supply and the demand curve that determine the market clearing price) are inapplicable to labour market.

### 3.2 NEO – KEYNESIANS

Immediately after the publication of Keynes’s “The General Theory” in 1936, considerable effort was made to absorb Keynes’s theory into the neoclassical theoretical framework. Two economists can be considered as founding fathers of this approach to economics. In Great Britain, John Hicks, already in 1937 published his famous article “*Mr Keynes and the Classics: A Suggested Interpretation*,” that was the first attempt to formalise the arguments laid down by Keynes in his “The General Theory”. In the US Paul Samuelson was the most

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<sup>72</sup> Keen, Steve. 2011. *Debunking Economics: The Naked Emperor Dethroned?* (rev. and expanded edn). Zed Books, London and New York. P. 129-30

<sup>73</sup> Idem, p. 133

important representative of the Neo-Keynesian School of Thought. His influential textbook (“Economics”<sup>74</sup>) is considered to be “canonical” and played a major role in introducing Keynes’s theory to American economists.

The Neo-Keynesian economic theory rejected many key ideas from “General Theory” and omitted or diluted some of Keynes’s important insights. That was the reason why Joan Robinson in 1962 famously called Samuelson and Hick’s interpretation of Keynes’s theory “bastard Keynesianism”<sup>75</sup>. I will point out two reasons that affected this specific “neo-Keynesian” interpretation:

1. Political - Keynes’s ideas started to penetrate United States academic circles in the late 1940s and the beginning of the 1950s. The political debate of this period in America was marked by the so-called Second Red Scare, that is public campaign of persecution and demagogic attacks against people with (allegedly) left-wing sympathies, directed by Senator Joseph McCarthy. It is in this context that the first Keynesian textbook - “The Elements of Economics”<sup>76</sup> by Lorie Tarshis -, in the United States, was published. Tarshis’s book gave an excellent summary of Keynes’s General Theory and was very close in spirit to the Post-Keynesian school. In spite of very good initial reviews, Tarshis’s textbook was withdrawn from the economics departments syllabuses very fast, due to “conservative business pressuring” and an organised campaign of McCarthy followers. As a result, American universities replaced Tarshis’s book with Paul Samuelson’s “Economics” and it was his (Neo-Keynesian) interpretation of Keynes’s theory that was presented to the subsequent generation of economic students in the US<sup>77</sup>. For Davidson, *“Paul Samuelson saved the term “Keynesian” in economic textbooks from being completely destroyed by the McCarthy anticommunist movement at the time. The cost of such saving, however, was to sever*

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<sup>74</sup> First published in 1948 till now has appeared in nineteen different editions, the most recent one in 2010. Until the twelfth edition it was written entirely by Samuelson, later editions were revised and co-authored by a Yale University professor William Nordhaus.

<sup>75</sup> Turner S. Marjorie: „Joan Robinson and the Americans”, M.E. Sharpe, 1989, p. 110.

<sup>76</sup> Tarshis, Lorie. 1947. The Elements of Economics: An Introduction to the Theory of Price and Employment, Houghton Mifflin Co., Boston.

<sup>77</sup> Colander, David; Landreth, Harry (1998), “Political Influence on the Textbook Keynesian Revolution: God, Man, and Laurie (sic) Tarshis at Yale”, in O.F. Hamouda and B.B. Price, Keynesianism and the Keynesian Revolution in America: A Memorial Volume in Honour of Lorie Tarshis, Cheltenham: Edward Elgar, pp. 59–72.

*the meaning of Keynesian theory in mainstream economic theory from its General Theory analytical roots*”<sup>78</sup>.

2. The tendency to interpret Keynes’s theory in the theoretical framework of neoclassical economics. The so-called Neoclassical synthesis (the term was coined by Paul Samuelson in his 1955 edition of “Economics”) conflates Keynes and the neoclassical theory. The Neo-Keynesians, contrary to Keynes, endorse three key-assumptions of the neoclassical theory: neutral money, gross substitution and the ergodicity of the future. After Hicks and Samuelson’s reinterpretation of *The General Theory*, there was nothing really left from its potentially revolutionary insights. The “neoclassical synthesis” became the dominating economic macroeconomic theory both in academic and policymakers circles. Contending economic theories were marginalised and “(...) *Keynes’s revolution was aborted almost as soon as it was conceived*”<sup>79</sup>.

Neo-Keynesian macroeconomics was based on two main analytical tools : the so-called IS-LM model (Investment and Saving – Liquidity preference and Money supply) and the Philips Curve. The IS-LM model was created by John R. Hicks and later developed by another Neo-Keynesian economist. Hicks’s aim was to make a mathematical summary of Keynes’s arguments from “The General Theory” by showing the relationship between real output and interest rates and the hypothetical impact of monetary and fiscal policy on macroeconomics. The Philips curve was an empirical observation of the inverse relationship between rates of unemployment and rates of inflation (i.e. low unemployment was correlated with high inflation and vice versa) in national economy<sup>80</sup>.

Both concepts (the IS-LM model and the Philips curve) were important components of the theoretical and policy making apparatus of the Neo-Keynesian theory. Hicks and Samuleson were successful in an attempt to create a new macroeconomic paradigm which conflates “The General Theory” with classical economics.

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<sup>78</sup>Davidson P. : “The Keynes Solution: The Path to Global Economic Prosperity”, Palgrave Macmillan, 2009, p.177-78

<sup>79</sup> Davidson P. (ed.) : „Post Keynesian Macroeconomic Theory: A Foundation for Successful Economic Policies for the Twenty-First Century , Second Edition, p.8

<sup>80</sup> Philips W. : “The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957”, *Economica* Volume 25, Issue 100, pages 283–299, November 1958

But since they accepted *en block* all three basic axioms (the neutral money axiom; the ergodic axiom, and the gross substitution axiom) of the neoclassical theory, the “Keynesian” component of their doctrine was rather weak. There was no place for the fundamental uncertainty, subjective expectations and money as a store of value. Accordingly, the neoclassical synthesis economists believed that in the long run the market mechanism has a tendency to gravitate to the point of equilibrium and full employment. Keynes’s insights became only a special case of the classical theory – when the prices are sticky. Just like the economist before publication of “*The General Theory*” they saw the primary source of unemployment in wage rigidities (“sticky wages”) that were set by the collective bargain or by the minimum wage legislation.

### 3.3 NEW-KEYNESIANS AND NEW CLASSICALS

In the 1970s, the Neo-Keynesian theory lost its privileged place in academia and in policymakers circles due to its inability to explain the economic phenomenon of stagflation. In the face of simultaneous stagnant economic growth, high unemployment and high inflation, the traditional Neo-Keynesian policy prescription turns out to be incapable of curing the economic malaise.

The failures of macroeconomic management in the beginning of the 70s encouraged the more free-market orientated economists to attack the theoretical building block of the Neo-Keynesian theory. As a result, the “neoclassical synthesis” doctrine was gradually losing its importance in favor of the other schools : New Keynesian, New Classical economics, Real Business Cycle Theory and Monetarism. Those new theoretical approaches were characterised by the determination to purge the macroeconomic from Keynesian components. However, in their beginnings there were some important differences in their theoretical frameworks, in the advent of the financial crisis of 2007–2008, proponents of those schools (especially New Keynesians and New Classical) reached a new consensus: the so-called New Neoclassical Synthesis<sup>81</sup> that today constitutes the mainstream economy. Today the main differences between them concern the speed of adjustment of “sticky wages” to the equilibrium level, and the effectiveness of the so-called Fiscal Stimulus.

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<sup>81</sup> According to one of the prominent New-Keynesian economists Olivier Blanchard the difference between New Classical and New Keynesians has recently diminished and “ A largely common vision has emerged”. Blanchard O. J. “The state of macro”, Annual Review of Economics, 2009, 1(1), p.210.



In this section I will overview the main theoretical components the of “New neoclassical synthesis” and briefly present the main contribution of those new schools of thought to the theory of labour market.

### 3.3.1 MONETARIST SCHOOL AND NON-ACCELERATING INFLATION RATE OF UNEMPLOYMENT.

The theory of Non-Accelerating Inflation Rate of Unemployment (NAIRU) was created by Milton Friedman<sup>82</sup>, the intellectual leader of the Chicago School of Economics (Monetarist school), and later developed by one of this students – Edmund Phelps<sup>83</sup>.

In his 1968 presidential address to the American Economic Association, Milton Friedman attacked the central theoretical concept of the so-called Neoclassical synthesis school – the Philips Curve. Neo-Keynesians argued that the Philips Curve is a very useful tool of macroeconomic management. By a mix of monetary and fiscal policies governments can trade-off lower unemployment for higher inflation (and vice-versa).

But Friedman argued that this apparent compromise is in reality only an illusion. If government uses an expansionary monetary policy (i.e. increases the supply of money), this will decrease the unemployment and, in line with the quantity theory of money, increase the prices. Workers are temporarily misled by a so-called Money Illusion – they think about their wages in nominal and not real terms. In other words, they do not realize that in reality their purchasing power decreases due to the higher inflation. In the next period of the wage-negotiations workers would include the rate of inflation into their wage claims (this is what Friedman called the “theory of adaptive expectations”). The unemployment level would return to the previous level (determined by real factors like productivity of workers) but inflation would remain high.

This level of unemployment Friedman called the “natural rate of unemployment”. It supposedly includes frictional and structural unemployment and is consistent with the stable

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<sup>82</sup> Friedman, M. (1968), “The Role of Monetary Policy”, American Economic Review, vol. 58, pp. 1-17.

<sup>83</sup> Phelps, E. (1967), “Phillips Curves, Expectations of Inflation and Optimal Unemployment Over Time”, *Economica*, vol. 34, pp. 254-81. Phelps, E. (1968), “Money Wage Dynamics and Labour Market Equilibrium”, *Journal of Political Economy*, vol. 76, pp. 678-711.

prices. Today most economists prefer to use the term “non-accelerating inflation rate of unemployment” (NAIRU)<sup>84</sup> to point out that there is nothing natural about its level. According to the textbook definition NAIRU is an unemployment rate consistent with a constant inflation rate or simply the lowest unemployment rate that can be sustained without upwards pressure on inflation<sup>85</sup>.

Friedman and Phelps believed that the Philips curve is downwards sloping in the short-run, but in the long-run it is vertical. Their theory has important economic policies implications: every attempt to drive the level of unemployment below the NAIRU by an expansionary government macroeconomic policy will result in the same level of unemployment but with higher level of inflation (given the inflationary expectations included in wage demands of the workers). In other words NAIRU delivered a strong argument against state involvement in economy. Tools of macroeconomics management, inspired by the Neo-Keynesian theory, turned out to be not only inefficient but also harmful for the economics performance.

In chapter 3 I will discuss the Modern Monetary Theory alternative to NAIRU - that is NAIBER (non-accelerating-inflation-buffer employment ratio) inspired by works of Abba Lerner and Hyman Minsky.

### 3.3.2 NEW CLASSICAL SCHOOL

By introducing the NAIRU concept, the adaptive expectations theory and by distinguishing the short-run and long-run Philips-curve, Friedman and Phelps shook the fundamentals of the so-called Neoclassical synthesis. But economists from the Chicago school (Monetarists) admitted that government intervention could be efficient, at least in a short term. In the early 1970s, works of Robert Lucas, Thomas Sargent and Edward Prescott established a new macroeconomic school of thought that carried out even more radical critique of the Neo-Keynesian theory.

I will highlight two theoretical contributions of this “New Classical school” that were intended to purge macroeconomics from its Keynesians elements :

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<sup>84</sup> Term coined by a Neo-Keynesian economist James Tobin in Tobin J. : “Stabilization Policy Ten Years After,” Brookings Papers on Economics Activity, 1980(1), 19-78.

<sup>85</sup> Samuelson P. and Nordhouse W.: “Economics” McGraw-Hill/Irwin, 19<sup>th</sup> edition, p.621.

1) Lucas's Critique – Robert Lucas in his 1976 article challenged the relevance of the Neo-Keynesian macroeconomics models for policymaking decisions. For Lucas, those models do not take into account behaviour of the individuals that will necessarily be influenced by those policies. In other words, those models are flawed and misleading because their parameters are not policy-invariant. Potential impact of large-scale macroeconometric models is always sensitive to policy changes.

Lucas proposed to replace Friedman's concept of "adaptive expectations" with so-called Rational Expectations (a theory based on the works of John Muth). Economic models should be based on strong microfoundations, i.e. rules that govern the behaviour of the individual agents in the markets. According to Lucas and other New Classical economists, individuals are rational and they are making rational decisions about the economy using all the information available to them (also information about intended policy measure).

For instance, if market agents anticipate state attempts to boost the effective demand, those measures will be inefficient even in a short run. This pessimistic conclusion about possibilities of the monetary theory to manage the levels of inflation, output and employment was developed later by other New Classical economists (Tom Sargent and Neil Wallace) and is known today as the "policy ineffectiveness proposition"<sup>86</sup>.

2) Real Business Cycle Theory (RBC theory) – emerged in early 1980 as an off shot of the New Classical School, in order to reconcile the theoretical framework of the general equilibrium with recurrent economic fluctuations. In reality, the RBC theory includes different models (the most influential one was developed by Finn Kydland and Edward C. Prescott) but they all share some common features.

Just like other New Classical economists, RBC theorists accept the rational expectations hypothesis and perfect competition. In this model, economy is assumed to be always at full employment level (defined by Friedman as a "natural rate") and markets are clearing. Fluctuations in economy are caused by exogenous shocks, like changes in technology or productivity ("real" factors), and reaction of the optimising market actors to them (for

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<sup>86</sup> Sargent, Thomas & Wallace, Neil (1975). "'Rational' Expectations, the Optimal Monetary Instrument, and the Optimal Money Supply Rule". *Journal of Political Economy* 83 (2): 241–254.

instance, by increasing workers' preference for leisure the supply of labour force in economy will decrease).

In the RBC framework the alternating periods of economic growth and recessions were not seen as a market failure but as a socially optimal equilibrium response of utility maximising firms and households for technological (productivity) shocks. Considering that, RBC theorists conclude that no activation policy should be undertaken by the governments.

### 3.3.3 NEW KEYNESIANS

The New Keynesian school emerged in the 1980s as a response to Monetarist and New Classical attacks on the Neo-Keynesian theory (neoclassical synthesis). The most prominent economists working in this framework are Joseph E. Stiglitz, Olivier Blanchard, Gregory Mankiw and Paul Krugman.

The New Keynesian school focuses their research programs on microeconomic foundations in order to explain macroeconomics disequilibrium. They accept the pertinence of Lucas's critique and Friedman's "natural rate" of unemployment but argue, contrary to New Classical economists, that there is no self-equilibrating market mechanism. Economy can stay far below the level of full employment for the extended periods of time due to "market imperfections".

Most of New Keynesians models stress the importance of the nominal rigidities that keep the markets from clearing. That means that supply of labour (or other commodities) does not adjust instantly to change in demand – the price and wages are "sticky". New Keynesian research program focuses on explaining the micro foundations of this wage (price) stickiness. J. Stiglitz and B. Greenwald in their paper offer survey of theories of wage rigidities in labour market<sup>87</sup> :

1) Efficiency wage theory – proponents of this view claim that it may benefit firms to keep wages above the level of workers' marginal revenue product. According to them, "efficiency wages" raise the workers' motivation and help avoid a situation when workers do less work than it was agreed on/required ("shirk"). Efficiency wage also helps to reduce labour turnover

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<sup>87</sup> Bruce Greenwald & Joseph E. Stiglitz, 1993. "New and Old Keynesians," *Journal of Economic Perspectives*, American Economic Association, vol. 7(1), pages 23-44, Winter.

(and therefore the costs of hiring and training of the new worker) and helps to attract workers with higher skills.

2) Insider-outsider theory of employment – developed by Assar Lindbeck and Dennis Snower<sup>88</sup>. Workers who are already employed (“insiders”) will use their favourable position and the fact that firms incur costs of labour turnover to bargain for higher wages, that will prevent the firms from increasing the employment.

3) Imperfect competition<sup>89</sup> – contrary to the New Classical school, New Keynesian models reject the assumption of perfect competition. Under imperfect competition some firms are price makers (not price takers) and, accordingly, they can use their market power to set and maintain their prices above marginal cost.

4) Implicit contract theory – assumes that between worker and employer there is an unwritten, mutually beneficial agreement. To a worker it is a guarantee of a nominal wage that is independent of their marginal productivity (that is necessary changing on different stages of business cycles) that is on average lower than it would be if wage rates changed automatically with changed marginal productivity. In other words, workers accept the lower but long-term average wage.

The purpose of all those theories is to explain the price stickiness in labour market. Other New Keynesian models search to provide explanations for price rigidities in markets for commodities. For instance, Gregory Mankiw developed a “menu costs theory” in order to explain short-term economic fluctuations. Prices are not perfectly flexible because firms bear the cost of adjustment (“menu cost”) and therefore they adjust them periodically rather than continuously.

With those microfoundations New Keynesian economists construct macroeconomic models, the so-called Dynamic Stochastic General Equilibrium Models in Macroeconomics (DSGE). Those models are examining the changes in the national economy over time (they are “dynamic”), they take into account random variable or variables that could affect economy

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<sup>88</sup> Assar Lindbeck; Dennis Snower: “Involuntary unemployment as an insider-outsider dilemma”, Stockholm Univ. of Stockholm 1984.

<sup>89</sup> This name is somehow misleading – in fact, imperfect competition is a precondition for all other theories of wage rigidities.

(they are “stochastic”<sup>90</sup>) and they search for a set of prices that would result in an overall (or “general”) equilibrium (i.e. all market would be clear).

Two key assumptions of DSGE models about microfoundations make them supposedly Lucas-critique-proof : all agents of the same type are identical (there is a “representative firm” and “representative households”) and they all have rational expectations<sup>91</sup>. According to New Keynesians, by summing up decisions of those agents it is possible to establish a set of prices that would equalise supply and demand in every market, and therefore DSGE can be a useful macroeconomic forecasting model.

#### 4. CONCLUSIONS

My aim in this chapter was to provide an overview of theoretical explanations of unemployment phenomena in modern capitalist economies. Given the abundance of the literature on the topic, I could only present a very limited number of the most important ideas and theories. Considering the subject of my thesis, I choose one criterion of selectivity: the influence that a given theory had for policy makers decisions. In other words, I considered only those economic doctrines that (at least to some degree) were implemented by politicians that tried to resolve the problem of unemployment.

In the light of these considerations, I proposed the following periodisation of the theories of unemployment : the classical theory, Keynes’s Revolution and the Post–World War II era.

Classical economists perceived labour market as any other commodity market and therefore had not seen any need for developing the theory of unemployment in any systematic way. Let us point out, however, three theoretical building blocks that were later synthesised by Arthur Cecil Pigou into a so-called Classical Theory of Unemployment. Firstly, a view that economy has a self-adjusting mechanism (Adam Smith’s “invisible hand”) and if only left alone, it will always equilibrate. Secondly, Say’s law of the markets where money is only a device that

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<sup>90</sup> Stochastic (synonym of random)- being or having a random variable. In case of DSGE models it can be technological shock, changing price of important commodity or different macroeconomic policies of governments.

<sup>91</sup> Minority of DSGE models consider heterogeneous agents and/or adaptive expectations. See for example: Krusell, Per; Smith, Anthony A., Jr. (1998). "Income and wealth heterogeneity in the macroeconomy". *Journal of Political Economy* 106 (5): 243–277. George W. Evans and Seppo Honkapohja (2001), *Learning and Expectations in Macroeconomics*. Princeton University Press,

facilitates the exchange of goods and services. Thirdly, J.B. Clark's marginal theory of income distribution, where owners of each factor of production receive income that is proportional to their contribution to production.

Given those assumptions, classical economists argued that unemployment is caused by exogenous factors that prevent market from achieving the level of full employment. They argued that every "market interference", like minimum wage legislation or labour union activities, will result in excess of supply over demand in the labour market. The classical theory of unemployment ruled out the possibility of "involuntary unemployment" that would be a natural consequence of the market mechanism. On the policy recommendation level that meant that fully flexible wages would solve the problem of unemployment.

The publication of "The General Theory of Employment, Interest and Money" in 1936 was a major paradigm shift in theory of unemployment. Keynes attacked two central concepts of classical economy: the belief that market is a self-adjusting mechanism and Say's law of the markets. In Keynes's theory, market agents are functioning in environment of fundamental uncertainty that influences their subjective expectations about profitability of the future investment.

In this world money is not only a lubricate of exchange but can also serve as a store of value. This, in turn, will cause leakages from the circular flow of income and expenditure that will not be offset by investment or extra consumption. As a result, economy as a whole will face a problem of insufficient demand that will result in underemployment equilibrium. Persisting unemployment will accompany the idle productive forces of society with no tendency towards the full employment level. Arguments put forward by Keynes in "The General Theory" provided a theoretical explanation of the existence of involuntary unemployment in capitalist economies.

In the third section I presented a general line of evolution of the main macroeconomic school of thoughts. Taking Keynes's theory as a point of reference, I argued that we can divided it in three groups that respectively developed (Post-Keynesians), radically revised (Neo-Keynesian) and fundamentally criticized Keynes's ideas (New Neoclassical Synthesis).

Economists from the Post-Keynesian school not only retained all of Keynes's concepts and ideas presented in "The General Theory", but also creatively developed them. In fact, they presented even more radical critique of mainstream economics by showing, in "capital debates", that the neoclassical theory of income distribution is deeply flawed. By doing so, Post-Keynesians debunked the third component of the classical theory of unemployment (J.B. Clark's marginal theory of income distribution) and accomplished the work started with the publication of "The General Theory".

The Neo-Keynesian school ("Neo-classical synthesis") was a specific interpretation of Keynes's thought by Paul Samuelson and John Hicks. By rejecting the most important concept of Keynes's theory – i.e. the "fundamental uncertainty" – they effectively reduce Keynes's theory to a special case of the neoclassical theory. Two main analytical tools of the Neo-Keynesian school, that is the IS–LM model and the Philips curve, were unable to explain the economic phenomena of stagflation that occurred in the 1970s, and therefore they became vulnerable to theoretical attacks of the more conservative economists.

Milton Friedman contested the idea that government could exploit the trade-off between the rates of inflation and unemployment. Because of adaptive expectations of the economic agents expansionary monetary policies would always result in higher inflation with the same level of unemployment ("natural rate of unemployment" or NAIRU). The Neo-Keynesian school was also criticised by Lucas and the New Classical school for not grounding their theory in microeconomics. They introduced and developed concepts of the rational expectations of markets agents and the idea that fluctuation in economy is caused by technological (productivity) shock. Recessions were caused by optimization strategies of individuals for changes in productivity, and therefore no activation policy should be undertaken by governments.

The New Classical school shares common features with the New Keynesian school that arose in the 90s and was focused on providing the explanation for price "stickiness". Today the New Keynesian school and the New Classical school merged to a large degree and together with the Monetarist School and the New Institutional School they constitute mainstream economics ("new neo-classical synthesis").



The New-neoclassical synthesis in many regards is a return to the Pre-Keynesian vision of unemployment. Three assumptions that form the basis of neoclassical economics : the neutral money axiom, the ergodic axiom and the gross substitution axiom rule out the possibility of involuntary unemployment. Contrary to Keynes and the Post-Keynesian vision in neoclassical framework (assuming that all prices and wages are perfectly flexible) there is no place for involuntary (cyclical) unemployment.



## CHAPTER II: POLITICS OF FULL EMPLOYMENT

In the first part of my dissertation, I presented an overview of economic theories of labour markets and unemployment. We saw that the publication of Keynes, “The General Theory of Employment, Interest, and Money” in 1936 constituted a critical point with regard to the previous (neo)classical tradition. In his magnum opus Keynes provided a coherent theoretical explanation of involuntary unemployment and undermined the (neo)classical dogma of self-adjusting market.

Now I will depart from the theoretical consideration and focus on some political implications of the ideas previously discussed. Chapter 2 consists of two sections.

The first section deals with economic policies inspired by the Keynesian theory. Keynes not only comprehensively challenged the orthodox vision of the labour market on the theoretical grounds, but also outlined macroeconomic policies tools that could bring economy back to the full employment level. Therefore, in this first section, we will focus on the effectiveness of Keynesian counter-cyclical demand management policies.

In the second section, I will discuss the argument put forward by a Polish economist Michał Kalecki in his 1943 essay, entitled “*Political Aspects of Full Employment*”, that limits to full employment are not economical, but political. I will also give a brief overview of a changing policy attitude towards the problem of unemployment. Immediately after the Second World War most of the governments of developed countries were committed to achieving and maintaining full employment. In the 70s focus of policymakers shifted from the full employment to the low inflation target. Accordingly, much of the economic policy decisions were transferred from governments to the independent central banks. As a consequence of the Global Financial Crises of 2008 the problem of unemployment was pushed even lower in the hierarchy of macroeconomic goals, in favour of balanced budgets.

## 1. KEYNES'S ECONOMIC POLICIES RECOMMENDATIONS

The essence of Keynes's message from "The General Theory" can be summed up as follows: in capitalism, economy can stabilise at "unemployment equilibrium" (i.e. the existence of involuntary unemployment) and there is no automatic market mechanism that could lift the economy back to the full employment level. According to Keynes, depressed economy will not equilibrate itself and even if it did – the social costs (like long-term unemployment and unused productive capacities of societies) of prolonged depressions are simply too high to bear (as he once pointed out: "*In the long run we are all dead*").

In spite of those market failures and contrary to radical social thinkers and economists of Marxist provenance, Keynes (partisan of the Liberal Party) did not advocate the abolishment of capitalism. Instead, he proposed a set of economic reforms that, in his opinion, could preserve the system. In fact, Keynes's political philosophy was very conservative and his proposals intended to defend the capitalism against its excesses. For Keynes, properly state-managed market economy could provide stable growth and employment for everyone.

The main deficiencies of unmodified capitalism were summarised by Keynes in the opening line of the last chapter of "The General Theory" : "*The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes*"<sup>92</sup>. Accordingly, his policy proposals were thought as remedies for those problems.

### 1.1 MONETARY POLICIES

In section 2.4 of the first chapter we saw that Keynes analysed the economy as circular flow of income and expenditures between households, firms and governments. When the outflows from this flow ("leakages" in the form of savings, taxes and imports) are not offset by the simultaneous inflows ("injections" in the form of private investment, government spending and exports), the economy will suffer from the deficient demand. This relation can be shown in the following equation:

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<sup>92</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.372

$$\text{Savings} + \text{Taxes} + \text{Imports} = \text{Investment} + \text{Government Spending} + \text{Exports}$$

For Keynes, governments should provide counter-cyclical demand management by assuring that leakages are always counterbalanced by injections. In case of economic slowdown and in order to avoid prolonged recessions, government should provide incentives for the private sector to invest. This can be achieved by lowering the tax burden (i.e. diminishing the outflows), or by encouraging the business owners to invest (i.e. increasing the inflows) by lowering the costs of obtaining the credit.

According to Keynes, monetary policy makers should focus on keeping the long-term interests rates low. This can be achieved by expansionary monetary policies of the central bank: increasing the supply of money in the banking system would cause the interests rates to fall. This “policy of cheap money” would, in turn, encourage private firms to take credits and to invest. The idea that low, not high, interest rates could boost the private investment was a real *novum* in economic thinking and Keynes’s original contribution.

It is worth pointing out here that neo (classical) economists also recommended to increase the supply of money in case of recession. Contrary to Keynes, however, they believed that it was a sufficient condition for a recovery. Keynes was more skeptical about the efficiency of monetary policies and treated lowering the interest rates only as a *sine qua non* condition of proper anti-crises treatment.

In chapter 15 of “The General Theory” entitled “The Psychological and Business Incentives To Liquidity”, Keynes explains why the “policy of cheap money” will not be sufficient to get the economy out of the slump:

*“There is the possibility, (...) that, after the rate of interest has fallen to a certain level, liquidity-preference may become virtually absolute in the sense that almost everyone prefers cash to holding a debt which yields so low a rate of interest. In this event the monetary authority would have lost effective control over the rate of interest”*<sup>93</sup>.

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<sup>93</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.207

This passage was often considered as Keynes's description of the so-called Liquidity Trap- a situation when injection of money into private banking system by the central bank fails to stimulate private investment due to the preference of the private sector for hoarding cash.

The opinion that monetary policy is largely ineffective in a case of severe recession is commonly shared by Keynesian economists of all strands (Post-, Neo- and New Keynesians). One of the strongest modern day proponents of this idea is Richard Koo who coined the term “balance sheet recession”<sup>94</sup>. According to Koo (who is clearly inspired by Keynes via works of Hyman Minsky), balance sheet recession occurs when the private sector (firms and households) is collectively focused on saving, rather than investing and spending. Because the private sector keeps repaying the debt (balancing the assets and liabilities) there will be nobody to invest.

This is exactly what Keynes meant by the “paradox of thrift : actions that are rational from the point of view of the individual entity (saving in order to repay the debt) can have catastrophic consequences for the economy as a whole. According to Koo, in such a situation, increasing the money supply by the central bank will be ineffective because debt minimisation by the private sector will nullify the effectiveness of the monetary policy.

## **1.2 FISCAL POLICIES**

As we recall from the first chapter, in real-world monetary based economy firms function in an environment of fundamental uncertainty. If their expectations about prospects of profitable investments decrease for any reason, the demand for money of the private sector (its liquidity preference) will rise. Circular flow of income and expenditures will be out of balance because the “leakages” part (savings of the private sector) will exceed the “injection part” (investment of private sector) of the equation.

Because of this “saving glut”, economy will suffer from deficient aggregate demand. According to Keynes, in such a situation the only remedy is to stimulate the second

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<sup>94</sup> Koo R.: Balance sheet recession as the ‘other half’ of macroeconomics, *European Journal of Economics and Economic Policies: Intervention*, Issue 2 (September 2013). Koo R. *The Holy Grail of Macroeconomics - Lessons from Japan's Great Recession* (John Wiley & Sons).

component of the “injections” to circular flow, namely the government spending. In the last chapter of the “General Theory” he stated:

*“(...) it seems unlikely that the influence of banking policy on the rate of interest will be sufficient by itself to determine an optimum rate of investment. I conceive, therefore, that a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment (...)”<sup>95</sup>.*

Indeed, the culminating point of Keynes’s argumentation in the “General Theory” is a provision of the *raison d’être* for countercyclical state fiscal policies. According to Keynes, the state should step in, significantly increase public spending and, in so doing, close the gap between savings and investments (caused by liquidity preference of the private sector). For Keynes the ultimate goal of the state intervention was to solve “*the real problem, fundamental yet essentially simple... [namely] to provide employment for everyone*”<sup>96</sup>.

Keynes recommendation to increase the public expenditures was in sharp contrast with prevalent opinion of the time. Orthodox economists that populated British Exchequer in 20s and 30s (like Ralph George Hawtrey or Frederick Leith-Ross) defended the view that stimulating the economy by public spending will necessarily be ineffective since it would “crowd out” the private spending. Fiscal stimulus would solely transfer the resources between private and public sector but would not have any effects on the total level of unemployment or output<sup>97</sup>.

In the frequently quoted chapter 24 of the “General Theory” Keynes did not specify what he meant exactly by “socialisation of investments”, and consequently this term was a subject of controversy. Keynesian policies had often been labelled as quasi-communist (by conservative politicians) or social democratic (by social democrats themselves). In order to avoid the

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<sup>95</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.378

<sup>96</sup> Keynes, J.M. 1980. “Activities 1940–46. Shaping the Post-War World: Employment and Commodities.” in Donald Moggridge (ed.), Collected Works, volume XXVII. London: Macmillan.p.267.

<sup>97</sup> This assertion is known in history of economic thought as the “Treasury view”. It was perhaps best defined by Winston Churchill (then Chancellor of the Exchequer) in his 1929 budget speech: ““The orthodox Treasury view ... is that when the Government borrow[s] in the money market, it becomes a new competitor with industry and engrosses to itself resources which would otherwise have been employed by private enterprise, and in the process raises the rent of money to all who have need of it.”

erroneous interpretations of Keynes's ideas, it is necessary to scrutinise the concept of socialisation of investment.

In his 1926 pamphlet entitled "The End of Laissez-Faire" (1926), Keynes makes clear what his view on the role of state in economy is: "*The important thing for government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not done at all.*"<sup>98</sup> For Keynes, government's duty is to maintain the aggregate demand on the level that would preserve full employment. In order to achieve this goal it is not necessary for the state to assume responsibility for all economic activities. In 1929, Keynes together with Hubert Henderson wrote "Can Lloyd George Do It? An Examination of the Liberal Pledge" where he advocated reducing unemployment by programs of public spending.

As we can see, and contrary to assertions of Keynes's conservative detractors, by "socialisation of investments" he did not mean nationalisation of the means of production. He was supporting rather different forms of joint venture of public and private sectors or what is today called "public-private partnerships". As he put it himself: "*all manner of compromises and of devices by which public authority will co-operate with private initiative. But beyond this no obvious case is made out for a system of State Socialism which would embrace most of economic life of the community*"<sup>99</sup>.

But it would be equally misleading to portray Keynes as a founding father of the post-war European welfare state. As Skidelsky noticed, "*Keynes was thinking about the state as an investor, not as a consumer*"<sup>100</sup>. He would approve a modest social safety net (family allowance and unemployment benefits) but was rather concerned with size and consequent financial burden of the Beveridgean project of the welfare state<sup>101</sup>. In light of the broad range literature now available, there is no ground for assertion that a big public sector and large public expenditures are natural implications of Keynes's recommendations<sup>102</sup>.

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<sup>98</sup> Keynes, J. M. *Essays in Persuasion*, W. W. Norton & Company, Inc. New York, 1963, p.317.

<sup>99</sup> Keynes, J. M. *The General Theory of Employment, Interest, and Money*, A Harvest Book, 1964, p.378

<sup>100</sup> Skidelsky R. (2010) : "Keynes : The Return Of The Master", *Public Affaires*, New Your, p.176

<sup>101</sup> On the debate between Beveridge and Keynes see Marcuzzo M.C.: "Whose Welfare State? Beveridge versus Keynes" in: "No Wealth but Life Welfare Economics and the Welfare State in Britain, 1880–1945" (edited by. Backhouse R. E and Nishizawa T.) Cambridge University Press (2010).

<sup>102</sup> On Keynes's view on welfare state see for example: Kregel, J.A. 1985. *Budget Deficits, Stabilisation Policy and Liquidity Preference*, Keynes's Post-War Policy Proposals, In F. Vicarelli (ed.) *Keynes's Relevance Today*. London:



However, that is not to say that Keynesian fiscal policies cannot be used in order to achieve the goals valued by left of the political spectrum. Indeed, Keynes's theory was warmly welcomed by the reformist wing of the labour movement, which focused more on rising the consumption of the workers than on control of the means of production.

In fact, what Keynes recommended was increased government expenditures in order to stimulate aggregate demand. As long as government is spending, the question of composition of public investments is secondary for him (*"Pyramid-building, earthquakes, even wars may serve to increase wealth, if the education of our statesmen on the principles of the classical economics stands in the way of anything better"*<sup>103</sup>). In this sense, Keynesian policy recommendations are "value free" - meaning that they can be adopted by governments with both right and left-wing agenda<sup>104</sup>.

The closest Keynes got to discuss the details of the "socialisation of the investments" was in his pamphlets *"We can Conquer Unemployment"* and *"Can Lloyd George do it?: An examination of the Liberal pledge"* (written together with Hubert Henderson), where he made a strong case for big programs of public works in order to decrease unemployment and get the British economy out of the slump. In his appraisal of the political program of the Liberal Party (then headed by Lloyd George) he wrote: *"It is a question of the State putting its hand to the job or of its not being done at all. Roads, afforestation, reclamation and drainage, electrification, slum clearance and town planning, the development of canals, docks and harbours"*<sup>105</sup>. As we can see, although the composition of public investments was not an essential element in Keynes's overall argumentation, he had some preferences : government should invest in public infrastructure.

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Macmillan; Peacock A. (1993), Keynes and the role of the State in D. Crabtree and A.P. Thirlwall (eds), Keynes and the role of the State, London: Macmillan; Dimsdale, N.H. (1988), Keynes on Interwar Economic Policy, in W. Eltis and P. Sinclair (eds), Keynes and Economic Policy. The Relevance of the General Theory after Fifty Years.

<sup>103</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.129

<sup>104</sup> Ronald Reagan's administration (1981-1989) can be cited as an example of a conservative government that implemented Keynesian policies. Reaganomics was in fact based on stimulating aggregate demand by income tax rates cuts, capital gains tax and (in spite of declaration) a huge program of government spending on defense and military (in the context of the escalating Cold War). As a result, nominal national debt rose from \$900 billion to \$2.8 trillion during Reagan's administration.

<sup>105</sup> Keynes, J. M., Henderson H. : *"Can Lloyd George do it?: An examination of the Liberal pledge"*, Nation and Athenaeum (1929),p.32

The most controversial aspect of Keynes's proposition was the question of funding countercyclical public investment. Since the aim was to increase the total amount of investment, government should not rise the tax burden on the private sector (and increase the "leakages" from our circular flow of income). Therefore, the only possibility for the government was to borrow the money, i.e. the increasing of the deficit spending. Contrary to popular belief and some erroneous interpretations that portrayed Keynes as an irresponsible deficit spender, he had a rather conservative view on national debt.

Firstly, a careful reading of Keynes's texts shows that he made a clear distinction between productive and unproductive debt (or what he called "dead-weight debt"). His proposition was to separate investment (capital budget) from consumption expenditures (ordinary budget) of the government<sup>106</sup>. According to Keynes, governments should run surpluses in their ordinary budget that, in turn, should be "*transferred to the capital Budget, thus gradually replacing dead-weight debt by productive or semi-productive debt (...)*"<sup>107</sup>. Kregel noticed<sup>108</sup>, as referred by Mario Secarrecia; "*(...) chronic operating deficits in the 'normal' or 'ordinary' budget would instead be a visible sign of a failure on the part of governments to remain committed to an active public investment policy of achieving full employment*"<sup>109</sup>.

Secondly, Keynes believed that properly directed public investment would pay for itself in the long term. Brown-Collier and Collier pointed out correctly that for Keynes productive investments were crucial : "*Public investment should consist of those projects that provide a real return over time, either in cash returns such as public enterprises, or indirect returns such as school buildings*"<sup>110</sup>. Provided that government invests in profitable (in the sense : beneficial for society) projects, "dead-weight debt" should not be an issue. Government spending in one budgetary year will provide returns in the following years (for example infrastructure). Suitably managed public debt and budget deficits will be self-liquidating problem.

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<sup>106</sup> Keynes, J.M. (1980) The Collected Writings of John Maynard Keynes, Vol. XXVII, London: Macmillan, p.405

<sup>107</sup> Keynes, J.M. (1980) The Collected Writings of John Maynard Keynes, Vol. XXVII, London: Macmillan, p.277

<sup>108</sup> Kregel, J.A. 1985. Budget Deficits, Stabilisation Policy and Liquidity Preference, Keynes's Post-War Policy Proposals, in Keynes's Relevance Today, ed. Viciareli F., p.32.

<sup>109</sup> Secarrecia M. Socialization of Investment, ( in: Elgar Companion to radical economics, ed. by Arestis P. and Sawyer M.), Edward Elgar(1994), p. 378

<sup>110</sup> Elba K. Brown-Collier and Bruce E. Collier : Journal of Post Keynesian Economics, Vol. 17, No. 3 (Spring, 1995), pp. 341-355

Finally, in order “(...) *to preserve sound accounting, to measure efficiency, to maintain economy and to keep the public properly aware of what things cost*”<sup>111</sup>, the cost of particular public service should be directly connected with the source out of which they are provided. Keynes endorsed matching expenditures with benefits they generate<sup>112</sup> : for instance, unemployment benefits should be financed out of social security contributions (of employer and worker) and not from taxation of the general population.

Given Keynes’s qualifications to government spending it should be clear that it is not correct to portray him, as some conservative critiques do, as “fiscally irresponsible”. It is true that Keynes encouraged increased government expenditures in order to offset diminished private investment, but he was quite concerned with unproductive debt that could get “*out of proportion to the growth of the national income*”<sup>113</sup>. Consequently, labelling the government spending that does not satisfy the above requirements as “Keynesian policies” is questionable.

The last point that needs to be clarified is the exact mechanism by which increased government spending would bring back economy to the full employment level. One of Keynes’s pupils and his closest collaborator, Richard Kahn, in his famous article from 1931<sup>114</sup>, developed the concept of “fiscal multiplier” (also known as “Keynesian multiplier”) that supposedly measures how government spending stimulates total output and employment.

The Kahn-Keynes multiplier can be defined as a “*change in real GDP or other measure of output caused by a one-unit increase in a fiscal variable*”<sup>115</sup>. For instance, if one Pound spent by the British government cause increase in British GDP of 2 Pounds, the multiplier effect would be of a factor of 2.

The theory of multiplier is tied up to Keynes’s concept of Marginal Propensity to Consume (MPC – discussed in the first chapter) that measures what the fraction of individual increase in income spent on consumption is. In other words, MPC shows what proportion of a person’s

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<sup>111</sup> Keynes, J.M. (1980) *The Collected Writings of John Maynard Keynes*, Vol. XXVII, London: Macmillan, p.224-225

<sup>112</sup> Elba K. Brown-Collier and Bruce E. Collier : *Journal of Post Keynesian Economics*, Vol. 17, No. 3 (Spring, 1995), pp. 347

<sup>113</sup> Keynes, J.M. (1980) *The Collected Writings of John Maynard Keynes*, Vol. XXVII, London: Macmillan, p.366

<sup>114</sup> R. F. Kahn (June 1931). "The Relation of Home Investment to Unemployment". *The Economic Journal* (Wiley-Blackwell) 41 (162)

<sup>115</sup> Ethan Ilzetzki, Enrique G. Mendoza and Carlos A. Végh: “How Big (Small?) are Fiscal Multipliers?”, International Monetary Fund, Working Paper March 2011.

additional income will be spent (MPC)<sup>116</sup>. The higher the MPC, the greater would be the multiplier.

$$\text{The formula for the multiplier is : } \frac{1}{1-\text{MPC}}$$

The Kahn-Keynes theory of the multiplier can be better explained using a numerical example. Assuming that MPC of everybody in the society is 0,8 (80%), the multiplier is a factor of 5 (1/1-0,8). Let us further assume that government will increase its spending by 1000 on the goods produced by person A. In turn, A will spend 800 on goods produced by person B. Then, person B will spend 640 on goods produced by person C, and then C will spend 512 on goods produced by person D. This chain will continue repeating itself until exhaustion. In conclusion, the total increase in GDP will not be 1000 (the initial amount of money injected in to the economy by the government) but  $1000 + 800 + 640 + 512 + \dots \text{etc} = 5000$ . In other words, the impact of public expenditures on GDP will be multiplied by the factor of 5.

### 1.3 INCOME DISTRIBUTION

The monetary and fiscal tools were crucial in Keynesian anti-crises repertoire. He did not attach comparable importance to the question of trade unions (in “The General Theory” there are only three explicit references to the trade unions), wealth and income distribution. However, there are some hints in Keynes’s writings that do indicate that he considered large wealth disparities not only as something ethically reprehensible, but also as a potentially destabilising factor.

Firstly, Keynes opposed the view that there is moral justification for the inequitable distribution of wealth and incomes. Keynes disputed the popular belief (supported by orthodox economic theories) about the origins of the profit and economic growth. According to this argument, frugal and thrifty individuals postpone their current consumption (they save part of their income) in order to invest. Those investments create employment and increase overall wealth of the society. Therefore those individuals (entrepreneurs) deserve a reward in the form of profits for their sacrifices (delay of their consumption) and their service to community.

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<sup>116</sup> The counterpart of MPC is Marginal Propensity to Save (MPS). MPC and MPS should always sum up to 1.

But as it was shown in the first chapter, in Keynes's theory the causation is inverted, because *"investment preceded saving, both in causation and in time"*<sup>117</sup>. Since the causal relationship goes from investments to savings, Keynes noticed, *"(...) our argument leads towards the conclusion that in contemporary conditions the growth of wealth, so far from being dependent on the abstinence of the rich, as is commonly supposed, is more likely to be impeded by it. One of the chief social justifications of great inequality of wealth is, therefore, removed"*<sup>118</sup>.

Secondly, in a passing remark in chapter 8 of "The General Theory" Keynes seems to suggest that in fact, the question of distribution of wealth has some importance for his theory of effective demand: *"If fiscal policy is used as a deliberate instrument for the more equal distribution of incomes, its effect in increasing the propensity to consume is, of course, all the greater"*<sup>119</sup>. Since the Marginal Propensity to Consume (MPC) of low and moderate income individuals is relatively high, some level of wealth/income redistribution could stimulate total spending in economy (and therefore would have desirable results from the point of view of aggregate demand). Unfortunately, Keynes did not examine the question of wealth/income distribution and its consequences for the theory of effective demand in details<sup>120</sup>.

Thirdly, Keynes recommended designing the government budgets in such a way that they would reduce the size of fluctuation of level of output and unemployment in case of recession. These could be achieved thanks to so-called Automatic Stabilizers: a type of government transfer program like social security payments, unemployment insurance, subsidies and progressive income tax.

Contrary to fiscal policies discussed in point 1.2 of chapter 2, those automatic stabilisers are non-discretionary, in the sense that *"they operate without government deliberation about policy, and therefore without any decision-making lag time"*<sup>121</sup>. By increasing social transfers (like unemployment benefits) during the economic downturn, government stabilises the level

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<sup>117</sup> Vickers D. The investment function five propositions in response to Professor Gordon,(in: ) Can the Free Market Pick Winners?: What Determines Investment, ed. Paul Davidson, M.E. Sharpe (1993),p. 36.

<sup>118</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.373

<sup>119</sup> Idem, p.95

<sup>120</sup> Income and Wealth distribution does play a role however in the Post-Keynesian theory. For a more detailed examination of this question, see: Brown Ch.: "Does Income Distribution Matter for Effective Demand? Evidence from the United States", Review of Political Economy, Volume 16, Number 3, 291–307, July 2004

<sup>121</sup> Morgan J.: "Automatic stabilizers" in: An Encyclopedia of Keynesian Economics, Second Edition, ed. Cate T., Edward Elgar Pub, 2013, p.28.

of total spending in the economy and therefore offsets the negative consequences of the recession.

For all those reasons, Keynes embraced a moderate distribution of wealth through different government welfare programs and progressive taxation. He was not, however, committed to ideas of egalitarianism: “*For my own part, I believe that there is social and psychological justification for significant inequalities of incomes and wealth, but not for such large disparities as exist today*”<sup>122</sup>. In Keynes’s views income and wealth disparities were not a problem in itself (on the contrary- they were “beneficial”) – only *excessive* concentration of wealth was socially and politically dysfunctional.

#### 1.4 KEYNES’S POLICIES EFFECTIVENESS : AN APPRAISAL

Keynes’s theory provided theoretical justification for increased government interventionism. In the United States and Western Europe policy-makers of all political colors (“*We are all Keynesians now*”<sup>123</sup>) embraced the idea that demand management by fiscal and monetary tools (and to a lesser extent – some level of wealth distribution) can provide full employment and stable growth. Counter cyclical policies, supposedly inspired by Keynes (or, to be more precise, by specific interpretation of Keynes’s ideas) marked a period in a socioeconomic history of the so-called Western world, from 1940 until the late 1970s.

The effectiveness of Keynes’s policies recommendations is, however, a highly controversial topic among economists. The critics focused chiefly on the fiscal component of Keynes’s proposals. As I mentioned before, Keynes himself was involved in a heated debate with economists representing the so-called *Treasury View* (like Ralph Hawtrey), according to which public spending would “crowd out” private spending. The debate over fiscal stimulus revived in the context of adoption of The American Recovery and Reinvestment Act of 2009 (commonly referred to as “Obama economic stimulus package” or “fiscal stimulus”).

To quote one of the most outspoken modern-day proponents of the “Treasury view” and critic of fiscal stimulus, John H. Cochrane from Chicago University :

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<sup>122</sup> Keynes, J. M. *The General Theory of Employment, Interest, and Money*, A Harvest Book, 1964, p.374

<sup>123</sup> Phrase coined by Milton Friedman, but usually associated with U.S. president Richard Nixon.

*“(...) if money is not going to be printed, it has to come from somewhere. If the government borrows a dollar from you, that is a dollar that you do not spend, or that you do not lend to a company to spend on new investment. Every dollar of increased government spending must correspond to one less dollar of private spending. Jobs created by stimulus spending are offset by jobs lost from the decline in private spending. We can build roads instead of factories, but fiscal stimulus can’t help us to build more of both”<sup>124</sup>.*

According to Cochrane, theoretical arguments in favour of fiscal stimulus are flawed and therefore government spending programs will not cure the economic malaise. In fact, they can only make matters worse<sup>125</sup>.

Adherents of the rational expectations hypothesis and the Neoclassical school formulated another critique. The so-called Ricardo–De Viti–Barro equivalence theorem or simply the Ricardian equivalence proposition<sup>126</sup>, states that governments’ efforts to stimulate aggregate demand are deemed to fail. It is not important whether extra governmental spending will be financed by issuing the debt or increased taxes. According to Barro, since government will need to pay for today’s fiscal stimulus by increasing the taxes tomorrow, rational individuals will save money to pay for those future taxes. All extra public spending will be cancelled out by increased savings of the private sector, and all the governmental actions to attempt to boost the aggregate demand will be ineffective.

In spite of those theoretical objections to increased government spending, the overwhelming body of evidence has revealed that Keynes-inspired aggregate demand stimulus is in fact very effective. The following section of this chapter provides some important historical examples of the effectiveness of the expansionary fiscal policies.

The Great Depression of the 1930s had particularly devastating consequences for Japan's economy. The economic crises hit Japan in the 1930 and lasted until 1932. Japan experienced

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<sup>124</sup> Cochrane J. “Fiscal Stimulus, Fiscal Inflation, or Fiscal Fallacies?” (2009), unpublished, available at: <http://faculty.chicagobooth.edu/john.cochrane/research/papers/fiscal2.htm> [date last accessed 13 October 2014].

<sup>125</sup> Idem.

<sup>126</sup> Developed independently by an Italian economist Antonio De Viti De Marco and American Robert J. Barro. Barro, Robert J. (1974). “Are Government Bonds Net Wealth? Journal of Political Economy 82 (6): 1095–1117

severe double-digit deflation and its gross national product declined by 10% in 1930 and 9% in 1931<sup>127</sup>. In December 1931, the new Japanese Prime Minister Inukai Tsuyoshi (from Rikken Seiyūkai's political party) appointed as a Minister of Finance Takahashi Korekiyo, a man that is often referred to as the “Japanese Keynes”<sup>128</sup> for his systematic implementation of “Keynesian policies” even before the publication of General Theory.

Immediately after taking office, Korekiyo reversed the contractionary policies of the previous government (Minsei Party) and implemented the following reforms of the economy:

- abandonment of the gold standard and the fixed exchange rate, and floating of the Yen,
- monetary expansion and low interest rates,
- expansionary fiscal policies : deficit spending financed by the sale of bonds by the Bank of Japan<sup>129</sup>.

The Japanese government used large government deficit spending to stimulate economy – mainly on public infrastructure investment (land reclamation, irrigation, drainage, dykes, roads, and river repairs<sup>130</sup>) and on increased military spending. Government increased by 32 % in 1932 and another 16 % in 1933<sup>131</sup>. Interestingly enough, Korekiyo justified those new economic policies in terms of the Keynes-Khan fiscal multiplier and there are some hints that he actually had read Keynes pamphlet “Can Lloyd George Do It?”<sup>132</sup>

Hugh Patrick described the outcome of Korekiyo's reforms as “*one of the most successful combination of fiscal, monetary and foreign exchange rate policies, in an adverse*

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<sup>127</sup> Nanto K. Dick and Takagi S.: Korekiyo Takahashi and Japan's Recovery from the Great Depression, (In) The Interwar Economy of Japan: Colonialism, Depression, and Recovery, 1910-1940 (Japanese Economic History, 1600-1960, Vol. 2), edited by Smitka M., p. 143.

<sup>128</sup> Cha, M. S. 2003. “Did Takahashi Korekiyo Rescue Japan from the Great Depression?” The Journal of Economic History 63.1: 127–144. Smethurst J. R. From Foot Soldier to Finance Minister: Takahashi Korekiyo, Japan's Keynes. Harvard University Asia Center (2007).

<sup>129</sup> Nanto K. Dick and Takagi S. : Korekiyo Takahashi and Japan's Recovery from the Great Depression, (In) The Interwar Economy of Japan : Colonialism, Depression, and Recovery, 1910-1940 (Japanese Economic History, 1600-1960, Vol. 2), edited by Smitka M., p. 145

<sup>130</sup> Flath, D. 2000. The Japanese Economy, Oxford University Press, Oxford and New York, p.59

<sup>131</sup> Nanto K. Dick and Takagi S. : Korekiyo Takahashi and Japan's Recovery from the Great Depression, (In) The Interwar Economy of Japan : Colonialism, Depression, and Recovery, 1910-1940 (Japanese Economic History, 1600-1960, Vol. 2), edited by Smitka M., p. 145

<sup>132</sup> Idem., p. 146



*international environment, that the world has ever seen*<sup>133</sup>. Indeed, Japan was able to avoid the worst effects of the Great Depression, and by the late 1932 Japanese economy was growing again. Numerous economic historians attribute a crucial role in reversing the Japan economic downturn to Korekiyo's reforms<sup>134</sup>.

Perhaps the most famous historical example of government spending aimed to stimulate aggregate demand was a set of federal programs ("The New Deal") launched in the 30s by President Franklin D. Roosevelt in the response to the Great Depression. Even today, there is no consensus on the question of the effectiveness of the New Deal's fiscal policies and the question is still controversial among the economists.

Analysing the attitudes towards Roosevelt's administration policies as a classification criterion, one can distinguish three groups of economists: those who think that the fiscal policy was central to recovery (this group includes mostly economists working in the Neo-Keynesian and Post-Keynesian traditions)<sup>135</sup>; the second group that downgraded the importance of government spending and connected the recovery with increased money supply<sup>136</sup>; and finally those who think that New Deal policies indeed prolonged the economic crisis<sup>137</sup>.

The detailed discussion of different interpretations of the New Deal's fiscal policies is beyond the scope of this work, but data from the US labour market in the 30s and the beginning of the 40s seem to indicate very strong correlation between government expenditures and decreased unemployment.

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<sup>133</sup> Patricik H. The economic muddle of the 1920's in: *The Economic Emergence of Modern Japan, The Dilemmas of Growth in Prewar Japan* ( ed.) by Morley J. Princeton University Press (1971), p.256

<sup>134</sup> Cha, M. S. 2003. "Did Takahashi Korekiyo Rescue Japan from the Great Depression?" *The Journal of Economic History* 63.1: 127–144; Teranishi, J. 2005. *Evolution of the Economic System in Japan*, Edward Elgar Pub., Cheltenham, UK and Northampton, MA. Cullen, L. M. 2003. *A History of Japan 1582–1941: Internal and External Worlds*, Cambridge University Press, Cambridge and New York; Drysdale, P. and L. Gower (eds), 1998, *The Japanese Economy*, Routledge, London and New York. Patrick H. The economic muddle of the 1920's in: *The Economic Emergence of Modern Japan, The Dilemmas of Growth in Prewar Japan* ( ed.) by Morley J. Princeton University Press (1971).

<sup>135</sup> For instance Galbraith K. J. *The Great Crash, 1929*, Mariner Books; Reprint edition (2009).

<sup>136</sup> Friedman M., Schwartz A. J. *A Monetary History of the United States, 1867-1960*, Princeton University Press (1971), Romer, C. 1992. "What ended the Great Depression?" *Journal of Economic History*, 52(4), pp. 757-84.

<sup>137</sup> Shlaes A. *The Forgotten Man*, Harper Collins (2009)

This can be seen in the following table:

<b>YEAR</b>	<b>GOVERNMENT EXPENDITURES AND INVESTMENTS (in current dollars)</b>	<b>RATE OF UNEMPLOYMENT</b>
1932	\$8.7 billion	24.1%
1933	\$8.7 billion	24.9%
1934	\$10.5 billion	21.7%
1935	\$10.9 billion	20.1%
1936	\$13.1 billion	16.9%
1937	\$12.8 billion	14.3%
1938	\$13.8 billion	19.0%
1939	\$14.8 billion	17.2%

*SOURCE: Historical Statistics of the United States: Millennial Edition, ed. Susan Carter, Scott Sigmund Gartner, Michael Haines, Alan Olmsted, Richard Sutch and Gavin Wright (Cambridge: Cambridge University Press, 2006)*

The data above show that New Deal's fiscal policies had rather moderate success: the unemployment rate decreased effectively by almost 7% but it was still a double-digit on the eve of World War 2 (17,2%). In reality, and contrary to commonplace knowledge, Roosevelt's fiscal stimulus was relatively small. Average government spending as percentage of GDP amounts to 12% during the Hoover Administration (1929-1932) and 15,4% during Roosevelt's New Deal (1933-1939)<sup>138</sup>.

Additionally, the effects of this modest increase in public expenditures were offset by two other factors: the policy of balanced budgets of state and local authorities (that cancelled out the benefits of the federal spending) and Hoover's tax reform (The Revenue Act of 1932) that dramatically raised the tax burden (i.e. the "leakages"), whose effects were felt for the first

<sup>138</sup> Bureau of Economic Analysis, National Economic Accounts, "Table 3.1. Government Current Receipts and Expenditures," 23 December 2008,

time in the fiscal year of 1933<sup>139</sup>. Moreover, Roosevelt was constantly flip-flopping on the question of deficit spending. He maneuvered between the moderate expansionary fiscal policy and budget consolidation (cutting public spending and increasing the taxes), which caused the recession of 1937–38.

In reality the injection of the federal spending into American economy was not big enough to compensate for the fall of private investments<sup>140</sup>. Given the modest increase in spending, the recession gap could not be closed and Roosevelt's policies could not bring back the economy to the full employment level. As E. Cary Brown famously noticed: "*fiscal policy... seems to have been an unsuccessful recovery device in the thirties – not because it does not work, but because it was not tried*"<sup>141</sup>.

With the outbreak of World War 2, the Roosevelt administration was forced to dramatically increase the size of the government expenditures: the average government spending as the percentage of GDP in 1940-1945 period amounts to 35.3% (during the New Deal years it was only 15,4%)<sup>142</sup>. The American economy almost instantaneously got back to the level of full employment. The problem of massive unemployment was finally resolved not by moderate New Deal policies but by much more radical "Military Keynesianism" of war years.

The more recent examples of the increased government spending include various national fiscal stimulus plans aimed at addressing the effects of the global financial crisis (The Great Recession of 2008). Given the national particularities of each country and different size and composition (tax cuts or direct public investments) of this stimulus, any general evaluation of their effectiveness should be made with caution.

However, we can affirm that their general outcome for the global economy was positive. The Report of the International Labour Organization (ILO) states that: "*The current recovery of the global economy owes much to the active use of fiscal stimulus measures against the global crisis*"<sup>143</sup>. The authors of this report surveyed accessible studies about the effectiveness of the

<sup>139</sup> Krugman P., Franklin Delano Obama?, New York Times, November 10, 2008

<sup>140</sup> Walton G., Rockoff H, History of the American Economy, Cengage Learning; 12 edition (2013), p. 440

<sup>141</sup> Brown E. Cary. Fiscal Policy in the Thirties: A Reappraisal, American Economic Review 46 (1956), p. 879

<sup>142</sup> Bureau of Economic Analysis, National Economic Accounts, "Table 3.1. Government Current Receipts and Expenditures," 23 December 2008.

<sup>143</sup> International Institute for Labour Studies : A Review of Global Fiscal Stimulus, EC-IILS Joint Discussion Paper Series No. 5, 16 November 2011

national fiscal stimulus and reached the conclusion that the vast majority of published research claims that fiscal stimulus programs were in general effective in reducing the unemployment and bringing back the growth of the economy (on 25 surveyed studies only 3 evaluate the results of the stimulus as “negative”)<sup>144</sup>. The ILO study showed as well that countries that adopted bigger stimulus (as a percentage of GDP) “showed relatively better GDP and employment”<sup>145</sup> recovery. For instance, the particularly successful Chinese stimulus was as big as 12.7 percent of China 2008 GDP, whereas advanced economies spent only 3.4 percent of their 2008 GDP on stimulus<sup>146</sup>.

One of the lingering myths about Keynes is that he was a “depression economist”, in the sense that his policy recommendation could be applied only during the economic downturn. In reality, Keynes had in mind a more comprehensive reform of the capitalist system, and getting the economy out of the slump thanks to monetary and fiscal policy tools was just the first step. Keynes put it this way: “*The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a semi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom*”<sup>147</sup>.

By keeping the economy in the “*permanent quasi-boom*” he meant flattening out the business cycle. On the level of the nation states, this could be achieved by demand management policies like progressive taxation, public expenditures, collective bargaining and income policies. To prevent the slumps on the international level, Keynes proposed the creation of the supranational institutions that would manage the monetary and exchange rates. Keynes was one of the architects of the so-called Bretton Woods Agreement (signed in 1944) that laid the foundations of the post-war financial system. The major aim of the Bretton Woods agreement was to regulate the international monetary system by establishing institutions like the International Monetary Fund (responsible for balance of payment adjustments of member countries) and the World Bank (responsible for poverty reduction and development assistance).

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<sup>144</sup> International Institute for Labour Studies : A Review of Global Fiscal Stimulus, EC-IILS Joint Discussion Paper Series No. 5, 16 November 2011, Appendix – Table A : Sample of studies on the effectiveness of stimulus measures

<sup>145</sup> Idem., p. 1

<sup>146</sup> Idem., p. 1

<sup>147</sup> Keynes, J. M. The General Theory of Employment, Interest, and Money, A Harvest Book, 1964, p.322

This period of effective functioning of the Bretton Woods institution (1951 – 1973) is sometimes referred to as a “*Golden Age of Capitalism*” or “*post–World War II economic expansion*”, and is characterised by politico-economic stability, high rate of growth and low unemployment levels. The 1973’s oil crisis is considered as a symbolic end of the Bretton Wood system, when Keynesian-managed capitalism was replaced by more laissez-faire approach to economy (“Washington Consensus”). A more detailed account of this evolution will be given in the section 2 of this chapter. Here I would only like emphasise the superiority of the Keynesian policies adopted after the second World War over the free market policies inspired by “Washington Consensus”. The available evidence seems to suggest that Bretton Woods era outperformed the Washington Consensus era in almost every aspect, except for the inflation rate that was slightly higher during the Bretton Woods era<sup>148</sup>.

## 1.5 CONCLUSIONS

Keynes not only correctly identified the cause of the economic malaise (insufficient aggregate demand), but also proposed a set of economic policies that would get the economy back to full employment levels. The traditional tool box of Keynesian economics includes : moderate income distribution (welfare program and automatic stabilisers), permanent low interest rates and the fiscal stimulus (tax cuts and direct government spending) aimed to offset lack of sufficient private investments.

The historical examples of application of the Keynesian policies discussed in this section showed their effectiveness. Takahashi Korekiyo’s fiscal stimulus preserved Japanese economy from the worst consequences of the Great Depression, while Roosevelt’s New Deal policies alleviated the problem of massive unemployment in the 30s , and military expenditures in the beginning of the 40s brought back the economy to full employment. In more recent years, the fiscal packages adopted by major countries after 2008 financial crises, proved their efficiency in reducing unemployment and enabling the economic growth.

In the next sections of this chapter we will turn to the question of why, in spite of apparent success of Keynesian policies, most governments abandoned their commitment to achieving and maintaining full employment.

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<sup>148</sup> Robert Skidelsky (2009). *Keynes: The Return of the Master*. P. 116–126.

## 2. KALECKI'S VIEW ON FULL EMPLOYMENT

Keynes's counter-cyclical fiscal policies proved themselves efficient in keeping the low rates of unemployment (close to the full employment level in most of the OECD countries<sup>149</sup>) and in maintaining the macroeconomic stabilisation<sup>150</sup>. In spite of their relative success, Keynesian macroeconomic policy tools were abandoned in the 70s in favour of more free market policies.

The displacement of Keynesian theory in academia, and reduction of its influence in decision-making circles coincided with the collapse of the Bretton Wood's system and the end of the "Golden Age" of capitalism. The long, post-war economic expansion that has its equivalents in every industrialised country ("Italian economic miracle", "Japanese post-war economic miracle", "Wirtschaftswunder" in Germany, "Trente Glorieuses" in France, etc..) ended abruptly in the mid 70s<sup>151</sup>.

There are many theories explaining why this 30-year-long period of unprecedented economic prosperity came to such a sudden end. In reality, the replacement of managed (Keynesian) capitalism by more laissez-faire oriented capitalism was a complex process to which contributed more than one factor, and it would be difficult to attribute a decisive role to one of them.

The most standard explanations of the end of the post war boom come from a mainstream economist (from the New classical and Chicago School of Economics). They argue that the crises of 1970 proved that Neo-Keynesian economics policies led to high levels of inflation and stagnant economic growth (stagflation). This theory is often associated with critique of the overprotective welfare state ("nanny state") by the conservative politicians. According to them welfare programs generated an insupportable financial burden for the society.

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<sup>149</sup> Mitchell, William & Joan Muysken: *Full Employment Abandoned: Shifting Sands and Policy Failures* (2008), Edward Elgar Publishing, p.10

<sup>150</sup> According to Martin Wolf, between 1945–71 there were 38 world financial crises. For comparison, in a shorter period from 1973–97 there were 139. Wolf, Martin (2009). "3". *Fixing Global Finance*. Yale University Press. p. 31.

<sup>151</sup> Economic historians agree that post-war economic expansion ended in 1970, but there is no consent upon the exact date. The following events are more often proposed as a symbolic end of the "Golden Age" of capitalism : the collapse of the Bretton Woods system in 1971, the 1973 oil crisis, the 1973–74 stock market crash, the ensuing 1973–75 recession.

Accumulated public debt and overgrown public institutions suppressed the private (i.e. “productive”) sector and, in consequence, lead to crises.

An alternative interpretation of the 1970s crises was provided by heterodox economists. As it was mentioned before (chapter 1 section 3.1), many post-Keynesian<sup>152</sup> economists argue that the dubious interpretation of Keynes’s thought by Hicks and Samuelson (so-called Neo-Keynesianism or Neoclassical Synthesis) made it vulnerable for theoretical attacks from conservative economists. As a result, not only Samuelson’s interpretation of Keynes was rejected, but all Keynesian traditions all together. This had serious practical implications since, according to Nicholas Kaldor, the phenomena of stagflation could be easily understood and dealt with in the post-Keynesian theoretical framework<sup>153</sup>.

Some Marxist economists<sup>154</sup> advanced the “full employment profits squeeze” theory of crisis, according to which economic crises in the 70s derived from increased labour militancy and resulting falling profit share. Strong trade unions shifted the configuration of power in the society on the behalf of working class. The result was a decline (“squeeze”) in capitalist profitability and economic stagnation.

In the following section, I will examine a lesser-known explanation of the fundamental change in the economic system that we have witnessed in the mid 70s. Michał Kalecki already in 1943 claimed that the full employment delivered by the Keynesian policy is impossible to sustain under the capitalist mode of production. In his article entitled "*Political Aspects of Full Employment*" Kalecki developed his theory of a political business cycle whose main assertion can be broadly resumed as follows: the barriers to full employment are political, not economical.

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<sup>152</sup> See interview with Geoff Harcourt available on line :  
Part 1 : <http://www.youtube.com/watch?v=Dcznyj1zo4c>  
Part 2 : <http://www.youtube.com/watch?v=DpSNiWBfabE>  
(Last access 22 October 2014)

<sup>153</sup> Kaldor, N. 1976. “Inflation and Recession in the World Economy,” *Economic Journal* 86 (December): 703–714.

<sup>154</sup> Notably: Glyn A. („British Capitalism, Workers and the Profit Squeeze, with Bob Sutcliffe. Penguin, 1972) and Marglin S. A. (“Profit Squeeze and Keynesian Theory” [in]: 1990. *Profit Squeeze and Keynesian Theory*, in *The Golden Age of Capitalism: Reinterpreting the Postwar Experience*, 153-186. (with Amit Bhaduri). S. Marglin and J. Schor (eds), Oxford: Clarendon Press)

Before analysing Kalecki's concept of the political business cycle in details, I will briefly discuss his intellectual background and his theoretical contributions to the theory of effective demand.

## 2.1 KALECKI'S THEORETICAL FRAMEWORK AND CONTRIBUTION TO THE THEORY OF EFFECTIVE DEMAND

Michał Kalecki was a Polish economist who not only anticipated Keynes "General Theory" but also, in some aspects, surpassed the Keynesian approach to the theory of effective demand. In 1933, Kalecki published his famous article entitled "*An Essay on the Theory of the Business Cycle*" where he lay out his theory of business cycle that included all the important theoretical ingredients of the later "Keynesian revolution".

In particular, Kalecki stated that investments determine the total level of output in the economy, analysed the determinants of the investments and consequence of their fluctuations on the effective demand. Kalecki's priority in developing the theory of effective demand is today undeniable<sup>155</sup>. Unfortunately, "*Kalecki was not born at the right time, did not live in the right place and did not write in the right language*"<sup>156</sup>.

Kalecki developed his version of the theory of effective demand starting from radically different theoretical framework than the author of "*The General Theory*". Keynes obtained his education in Cambridge and was raised in the neo (classical) economical tradition of Alfred Marshall, against which he rebelled later on. Kalecki, on the other hand, was a self-taught economist who drew his inspiration from Marx via writings of Mikhail Tugan-Baranovsky and Rosa Luxemburg.

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<sup>155</sup> On the question of Kalecki's priority of publications over Keynes see : Robinson J. : *Michał Kalecki: A Neglected Prophet*, The New York Review of Books, March 4, 1976 Issue In her letter from 1937, Joan Robinson wrote to Kalecki : "It must be rather annoying for you to see all this fuss being made over Keynes when so little notice was taken of your own contribution" (reproduced in : Patinkin, D. (1982) *Anticipations of the General Theory? and Other Essays*, Oxford: Blackwell.)

<sup>156</sup> Szeworski A. *A note on the changing approaches to Kalecki's ideas in the world literature* (in:) Kalecki's Economics Today (Routledge Frontiers of Political Economy) edited by: Sadowski A. and Szeworski A.



Kalecki was particularly strongly influenced by Marx's reproduction schema from volume II of "*Das Capital*", which he used to derive his famous profit equation. For Kalecki capitalist profits (P) are equal to capitalist consumption (C<sub>p</sub>) and capitalist investments (I):

$$P = C_p + I$$

Kalecki then noticed that : (...) *it is clear that capitalists may decide to consume and to invest more in a given period than in the preceding one, but they cannot decide to earn more. It is, therefore, their investment and consumption decisions which determine profits, and not vice versa*<sup>157</sup>. This means that the causation runs from investment and capitalist consumption to profit (not the other way around), and therefore "*fluctuations in production and profits depend on the fluctuations in capitalists' consumption and investment*"<sup>158</sup>.

We saw that even though our authors started from different intellectual points of departure, (neo) classical in Keynes case and Marxian in Kalecki's, they arrived to similar conclusions about business cycles in the market economy, driven, according to them, mainly by investment demand. The fundamental differences between those thinkers concern their approach to the social classes: while in Keynes's theory the question of class struggle is absent, it plays an important role in Kalecki's theoretical framework.

## 2.2 KALECKI ON POLITICAL ASPECTS OF FULL EMPLOYMENT

In spite of their different intellectual formations, the analytical tools and methodology, Kalecki's and Keynes's theory of business cycles are very similar. However, contrary to Keynes, Kalecki did not limit himself to the analysis of the purely economic aspects of fluctuations in the capitalist economy. By introducing some political consideration in his famous 1943 essay ("*Political Aspects of Full Employment*") he developed his theory of the political business cycle (as opposed to business cycle, pure and simple).

The essence of Kalecki's argument is simple: there are no technical obstacles to reaching full employment in capitalist economy. This can be achieved by government spending programs (provided that those expenditures are financed by borrowing and not taxes), like public

<sup>157</sup> Kalecki M. *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970* (1971), p. 78-79.

<sup>158</sup> Kalecki M. *Studies in the Theory of Business Cycles, 1933–1939* (1966), p.46

investments, reduction of indirect taxation, subsidisation of mass consumption, etc...<sup>159</sup> However, Kalecki argues, political factors would prevent capitalist government from pursuing the policy of full employment: “*there is a political background in the opposition to the full employment doctrine, even though the arguments advanced are economic*”.<sup>160</sup>

Kalecki claimed that every government committed to maintaining full employment would face social and political opposition of industrial leaders. This is somehow surprising given that maintaining full employment via countercyclical government spending would be beneficial not only for workers but also for capitalists (increased employment means increased profits). Why then, Kalecki asked, “*entrepreneurs do not gladly accept the synthetic boom which the government is able to offer them?*”<sup>161</sup>.

Firstly, the opposition of business leaders towards full employment is due to the “*dislike of government interference in the problem of employment as such*”<sup>162</sup>. Both Kalecki and Keynes recognised that private investment is the most volatile component of the aggregate demand. At this point, however, the superiority of Kalecki’s analysis over Keynes’s is clear: thanks to his class approach to economy, Kalecki was able to draw the conclusions that are absent in Keynes’s theory.

Kalecki argues that control over the investments decisions grants business community (i.e capitalists) a considerable power: eventually the level of output and employment in the economy depends solely on their discretionary investment decisions. Kalecki claims that capitalists are aware of this situation and will not hesitate to benefit from it in order to obtain concessions from government: “*This gives the capitalists a powerful indirect control over government policy: everything which may shake the state of confidence must be carefully avoided because it would cause an economic crisis*”<sup>163</sup>.

If, however, government would take over from the private sector responsibility for keeping the aggregate demand on full employment (by “socialising investments” to use Keynes’s terminology), capitalists would lose this powerful disciplinary device. This is why, according

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<sup>159</sup> This issue is discussed by Kalecki in more details in his 1944 paper, “Three Ways to Full Employment”.

<sup>160</sup> Kalecki M. *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970* (1971), p. 140

<sup>161</sup> *Idem.*, p.140

<sup>162</sup> *Idem.*, p.140

<sup>163</sup> *Idem.*, p.140

to Kalecki, “captains of industry” will oppose deficit spending directed at increasing the employment : *“The social function of the doctrine of 'sound finance' is to make the level of employment dependent on the state of confidence”*<sup>164</sup>.

The second reason for the political opposition against the full employment, according to Kalecki, concerns the direction of the government spending. This argument can be divided in two components:

- Opposition towards public investments - public investments will be tolerated by the “industrial leaders” only if they do not limit the profitable prospects for the private sector (this would be the case of public investments in hospitals, schools, highways, etc.). Since the scope of such investments is rather limited, they are afraid that, sooner or later, public investments will “crowd out” the private ones.
- Opposition towards public social transfers - “business leaders and their experts” will also oppose subsidies to mass consumption (like family allowances, subsidies to keep down the prices of necessities), even if they are not limiting the investments opportunities for the private sector. Here hostility of business community is caused not because their profits are in danger, but for ideological reasons: *“For here a moral principle of the highest importance is at stake. The fundamentals of capitalist ethics require that 'you shall earn your bread in sweat' -- unless you happen to have private means”*<sup>165</sup>.

Thirdly, Kalecki claims that even if the government (backed by organised labour) overcame this opposition and achieved the full employment, business community would oppose the maintenance of this state of affairs in the long term. *“The social and political changes resulting from the maintenance of full employment”*, would change the balance of power between capitalist and worker class in the favour of the latter. Full employment capitalism (contrary to laissez-faire capitalism) would erode the social position of the “captains of industry”, since they would lose the powerful disciplinary device over workers – fear of unemployment. Without this fear, workers and their trade unions would be in a more advantageous position to demand higher wages and better working conditions.

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<sup>164</sup> Kalecki M. *Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970* (1971), p. 145

<sup>165</sup> *Idem.*, p. 146

## 2.3 JOAN ROBINSON'S CONTRIBUTION

Joan Robinson was one of Keynes's closest collaborators, a pioneer of the Post-Keynesian school of thought and a major participant of the Cambridge Capital Debates. She befriended Michał Kalecki during his stay in the Cambridge University in the 1930s and since then Kalecki had significant intellectual impact on Robinson's thought<sup>166</sup>. Kalecki's influence on Robinson's thought was particularly evident in her famous "*An Essay on Marxian Economics*"<sup>167</sup>, which was an attempt to "*put class analysis, imperialism, and military expenditure into the General Theory*"<sup>168</sup>.

Joan Robinson shared Kalecki's skepticism about the ability of achieving full employment by laissez-faire capitalism. Just as Kalecki, Robinson argued that the unemployment is possible to eradicate via "*public expenditure and public control on a sufficient scale*", but due to the political opposition of the business community, governments will not be able to pursue the policy of full employment. In this short section I will briefly discuss her arguments put forward in her two open letters to "The Time" from 1943 and her brochure "*The Problem of Full Employment*".<sup>169</sup>

Robinson argues that unemployment is not an extrinsic feature of capitalism, but is in fact functional to it. Maintaining full employment in the long term would necessarily transform some social arrangements of "*private enterprise economy*". Consequently, governments committed to full employment policies will face political opposition of groups whose position would be undermined by lasting full employment.

According to Robinson, the first function of unemployment is to maintain the authority of employer over their employees: "*The master has normally been in a position to say: 'If you don't want the job, there are plenty of others who do.' When the man can say: 'If you don't*

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<sup>166</sup> On influence of Kalecki on Robinson's thought see: Harcourt G.S., Kriesler P. The Influence of Michał Kalecki on Joan Robinson's Approach to Economics, (October 24, 2010). UNSW Australian School of Business Research Paper No. 2010 ECON 21. Available at SSRN: <http://ssrn.com/abstract=1697046>

<sup>167</sup> According to Paul Sweezy Robinson's book was "*first work by a major British economist to show interest in Marx since the 19th century*". Sweezy, Paul M.; Böhm-Bawerk, Eugen von; Hilferding, Rudolf (1984). Karl Marx and the Close of His System & Böhm-Bawerk's Criticism of Marx. New York: Orion Editions, p.vi

<sup>168</sup> King E. J. *A History of Post Keynesian Economics Since 1936*, Edward Elgar Pub(2004), p.50

<sup>169</sup> Robinson J. Letter to "The Time" from January 22 and January 23 of 1943, published in Collected Economic Papers, Vol I, (1951), Robinson J. The Problem of Full Employment, Workers' Educational Association as Study Outline No. 10 in 1943.

*want to employ me, there are plenty of others who will," the situation is radically altered."* Eradication of the fear of unemployment would reinforce the bargaining position of the workers, weaken the factory discipline and erode the privileged economical position of the capitalist class.

The second function of unemployment in capitalism is to preserve the value of money. Full employment economy would enable the organised labour to make excessive wage demands and, in consequence, to initiate a vicious circle of demand-pull inflation. As a side notice Robinson observes that totalitarian regimes (fascist and communist) do not face the problem of inflation in spite of maintaining full employment (thanks to violent repression of the trade unions, propaganda appeal and wages regulated by the state).

However, Robinson claimed that full employment and low inflation are achievable also in the framework of parliamentary democracy. This would require some substantial reforms of capitalist system like for example extension of competence of work councils, national level wage agreement and full publicity of cost of production (in order to avoid cost push inflation).

## **2.4 THE KALECKI-ROBINSON POLITICAL BUSINESS CYCLE**

Kalecki and Robinson's theory of the political business cycle offers a credible explanation of the collapse of the so-called Golden Age of capitalism. This can be summarised as follows : in a parliamentary democracy high levels of unemployment are electorally unpopular and every politician running for re-election will take this factor into consideration. Thus, governments will use both monetary and fiscal macroeconomic tools to achieve, or at least get close to full employment.

However, for the reasons mentioned by Kalecki (and Robinson) this situation will be impossible to sustain in the long term: *"a powerful bloc . . . between big business and the rentiers' interests, and they would probably find more than one economist to declare that the situation was manifestly unsound. The pressure of all these forces, and in particular of big business, would most probably induce the Government to return to the orthodox policy of*

*cutting down the budget deficit*”<sup>170</sup>. Balancing the budget would, in turn, increase unemployment and so the political business cycle would go back to the point of departure.

The fact that government committed to full employment will necessarily face the political opposition of business community was acknowledged as well by another prominent Post-Keynesian economist - Nicholas Kaldor. In a way similar to Kalecki's, he argued that “*The reason of this antagonism (to Keynesian ideas), not openly acknowledged, was the change in the power structure of society which the pursuit of Keynesian policies has brought about.*”<sup>171</sup> The political objection towards full employment identified by Kalecki and Robinson played a major role in gradual erosion of the post-war socio-economic consensus in Europe and the US.

We recall that Kalecki's first argument concerned “*the powerful indirect control over government policy*” that capitalist class would lose in case of eradication of unemployment. Long-term full employment would ensure the governments more room for manoeuvring in their internal politics - particularly in fiscal policies and welfare programs. They simply would not be limited by the necessity of maintaining the so-called state of confidence of business community. Major advance in transportation and telecommunication infrastructure that we have witnessed since the mid-70s dramatically changed the relation of power between nation states and “captains of industry”. The capitalist class of a given country not satisfied with governmental policy (for instance, with tax reform) can simply choose not to invest (a sort of “investment strike”) in a given country and move the production to another country – more concerned with keeping the high levels of the “state of confidence” of the business community.

Secondly, Kalecki claimed that capitalists would oppose the direction of government spending : public investment and subsidising consumption. Here Kalecki seems to anticipate the ideological offensive against the welfare state and public services that was particularly acute in the 70s and 80s. In this rhetoric, the private sector is more efficient and dynamic than the sluggish and costly public sector. Precisely as Kalecki foresees, “captains of industry and their experts” were opposing the welfare state on the ethical grounds, because “*the*

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<sup>170</sup> Kalecki M. “Selected Essays on the Dynamics of the Capitalist Economy, 1933–1970”, Cambridge: Cambridge University Press, p.144

<sup>171</sup> Kaldor N. *Keynesian Economic after Fifty Years*, in : *Keynes and the Modern World*, (ed: Worswick D., Trevithick J), p.4

*fundamentals of capitalist ethics require that 'you shall earn your bread in sweat' -- unless you happen to have private means".*

Thirdly, elimination of the fear of unemployment would deprive the capitalists of disciplinary tools over workers. In the full employment economy, the power relation between capitalists and workers would change to the benefit of the latter and, consequently, give workers a better bargaining position. Higher wages would not only decrease the capitalist profits but (and this is the point made by Robinson) would also cause the inflationary pressures and undermine the “value of money”.

The end of the 1970s marked a radical shift in public approach to labour markets: the goal of providing the work for everybody was replaced by the commitment to keeping the price stability. The responsibility for finding employment was transferred from society to individuals (as well as blame – in case of not finding one). The role of fiscal policy was downgraded and priority was given to monetary policy conducted by independent (i.e. out of democratic control) central banks. Their only role is to keep the low inflation by manipulating the interest rates and controlling the money supply.

In this new institutional environment with changed public priorities, *“unemployment is part of the essential mechanism of the system, and has a definite function to fulfill”*<sup>172</sup>. This role consists of preventing the organised labour from making excessive wage demands. Indeed, after 1980 most governments of developed countries seem to accept higher levels of unemployment in exchange for greater price stability (see table in section 1.4).

### 3. CONCLUSIONS

The object of this chapter was twofold. Firstly, to provide a comprehensive examination of John Maynard Keynes’s economic policy recommendations. Secondly, to discuss the relevance of Kalecki’s theory of political business cycle for explanation of abandonment of the full employment commitment by most of the developed countries in the mid 70s.

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<sup>172</sup> Robinson J. Letter to “The Time” from January 22 and January 23 of 1943, published in Collected Economic Papers, Vol I, (1951),

Economic policies inspired by Keynes's theory were largely adopted by most of the developed countries in the 30s and 40s, and to a great extent contributed to post-World War II economic expansion. Those "Keynesian policies" included policies of permanent low interest rates, of fiscal stimulus (tax cuts and government investments) and, to some degree, of income distribution via welfare programs and so-called automatic stabilisers.

Examples of aggregate demand stimulus by government spending analysed in this chapter provided strong evidence of its effectiveness. Governments that adopted Keynesian policies were able not only to boost the economic growth and bring back full employment, but also to flatten out extremes in fluctuations of the trade cycle. This resulted in the unprecedented period of economic growth (so-called Golden Age of capitalism) that lasted from 1945 to the mid 1970s and was characterised by wage growth, welfare state expansion and low unemployment rates.

Michał Kalecki and Joan Robinson claimed that this policy of full employment will be impossible to sustain in the long term. Nevertheless, the reasons for that were political, not economic. Kalecki argued that achieving full employment is technically possible (via government spending), but it will not be sustainable for political reasons. According to Kalecki and Robinson, unemployment is functional to the laissez-faire form of capitalism. It is a powerful disciplinary device used by "captains of the industry" to control workers' wages demands, to keep the price stability and to influence the policies conducted by the governments. For Kalecki, elimination of the "fear of unemployment" would undermine the social and political position of the capitalist class, and therefore they will oppose the full employment policies.



## CHAPTER 3: PERSPECTIVES OF FULL EMPLOYMENT

In the precedent chapter we saw that starting from the mid-1970s most governments of the developed countries abandoned the commitment to achieve and maintain full employment through aggregate demand management. The main goal of the governmental macroeconomic policies became price stability (i.e. low inflation) and the responsibility for employment was transferred to the private sector. Indeed, just as Joan Robinson argued, the principal argument against the policy of full employment today is willingness to preserve the value of money. Mainstream economic theories (the concept of NAIRU) argue that, in order to eliminate the inflation, society needs to accept some levels of unemployment, because full employment would necessarily create an inflationary pressure (demand pull inflation).

In this chapter I will discuss an interesting recent advancement in economic theory - a development of a new macroeconomic school of thought which claims that sustainment of both full employment and price stability are not mutually exclusive goals. The fundamental message of the so-called Modern Monetary Theory (MMT)<sup>173</sup> can be resumed as follows: *“monetarily sovereign governments are always solvent, and can afford to buy anything for sale in their domestic unit of account even though they may face inflationary and political constraints”*<sup>174</sup>. Because sovereign government does not have any affordability constraints they enjoy extremely large domestic policy space and, therefore, they can focus both on keeping stable prices and eradicating unemployment.

This chapter consists of three sections. In the first section I will present the “intellectual family tree” of the MMT. In the second section I will discuss the MMT approach to macroeconomics, with special focus on the nature and role played by “fiat money” in contemporary economy. In the last section I will examine the MMT proposition concerning full employment policies: the proposition of the job guarantee (JG) known also as employer of last resort (ELS).

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<sup>173</sup> Also called : Chartalism, Neo-Chartalism, the Kansas City approach, and soft currency economics

<sup>174</sup> Éric Tymoigne and L. Randall Wray : *“Modern Money Theory 101: A Reply to Critics”*, Levy Economics Institute, Working Paper No. 778, p.3

## 1. HISTORICAL SOURCES OF THE MMT

The Modern Money Theory is a relatively new school of economic thought that originated in the early 1990s, but its intellectual lineage can be tracked down to the beginning of the 20th century. Indeed, MMT can be perceived as a creative synthesis of various intellectual traditions that already existed, rather than a completely new theory. In this first section I will briefly discuss some of those early theoretical contributions to MMT, namely the works of G. Frederick Knapp, Mitchell Innes, Abba Lerner's, and the theory of endogenous money. Hyman Minsky's concept of the employer of last resort (ELR) will be developed in the third section.

### 1.1 GEORGE FREDERICK KNAPP AND THE STATE THEORY OF MONEY (CHARTALISM).

The ideas that constitute the foundations of the Modern Money Theory can be traced back to the German economist Georg Friedrich Knapp (1842 –1926). Knapp in his book *“The State Theory of Money”* (1905) developed the term “Chartal money” from the Latin word *Charta*, which means a ticket or token. He established his theory of monetary system in opposition to the “metalistic” view, according to which the value of money comes from precious metals of which it is made (like gold or silver) or because it can be redeemed on such metal.

Knapp's theory provides an alternative explanation of the origins of money. In the mainstream (“metalist”) approach, emergence of the commodity money was a product of the spontaneous evolution of market exchange. To put it simply, market participants, in order to overcome the inconveniences of the market exchange, chose one commodity that can serve as common denominator (*numéraire*). Relative prices of all other commodities are expressed in terms of this one commodity, agreed upon by all other market participants.

According to Knapp, however, money did not evolve spontaneously, but was designed and created by the state. He points out that *“The money of a State is...what is accepted at public pay office”*<sup>175</sup>. In other words, state can arbitrary choose a unit of account in which citizens' debts towards that state (like taxes, fines, etc...) will be denominated. State is also free to

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<sup>175</sup> Knapp, G.F. (1924) *The State Theory of Money*, abridged and translated by H.E. Batson, London, Routledge & Kegan Paul, p.viii

choose any type of material that will function as a “money thing” denominated in that unit of account – “*the standard is not chosen for any properties of the metals*”<sup>176</sup>

To strengthen his argument, Knapp examines the situation of debts during the transition of one metal to another metal as a means of payment. For metalists, the unit of value gains its name in terms of the material. Then, according to them, when the state changes the means of payment, the absolute amount of debts should remain unchanged. However, Knapp argues that the historical experience shows differently. When the state declares a new means of payment, the state determines at the same time what other new material and how much of it would represent the unit of the means of payment. By doing so, the state maintains only the relative amount of the existing debts. In fact, “*the state treats the existing debts as the unit of value, ..., treats as the nominal debts*”<sup>177</sup>. The means of payment is changed by the state. In that case, debts as units of value are paid with the new means of payment. Hence, “*all debts are converted to the new metal, which proves that all units of account must be nominal*”<sup>178</sup>.

We can highlight three key points in Knapp’s theory on the modern monetary system. First, as his examination of debts shows, the unit of payment is always historical. The validity of one currency does not derive from its material content. The unit of value is defined historically. It is altered and denominated by the state. Its relation to the former unit is also defined by the state. So as Knapp famously states in the beginning of his book: “*MONEY is a creature of law. A theory of money must therefore deal with legal history*”<sup>179</sup>.

Secondly, when the state introduces a new means of payment, the state defines this new means of payment by its relation to the former unit of payment. So this transition from one metal to another necessitates the state to declare a conversion rate between these two metals. That is to say that debts are not metallic, but nominal. Knapp concludes that “*The nominality of debts and of the unit of value is a necessary premise before money can come into being. So Money is a means of payment, but not necessarily a material one*”<sup>180</sup>.

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<sup>176</sup> Knapp, G.F. (1924) *The State Theory of Money*, abridged and translated by H.E. Batson, London, Routledge & Kegan Paul, p.viii

<sup>177</sup> *Idem.*, p.14

<sup>178</sup> Wray, R. L. *Modern Money*, (in) Smith in J. (ed.), *What is Money?* Routledge, 2000, p. 50

<sup>179</sup> Knapp, G.F. (1924) *The State Theory of Money*, abridged and translated by H.E. Batson, London, Routledge & Kegan Paul, p.1

<sup>180</sup> *Idem.*, p.19

Thirdly, Knapp points out the important role of the state in this process. In fact, his historical argument is based on the examination of the state's activity. The state can alter the means of payment. The validity of the new unit as money is determined by the proclamation of the state. The state declares that the new currency will be accepted at public pay offices. Thus *“nominality of the unit of value is created by the State, in its capacity as the guardian and maintainer of law.”*<sup>181</sup>

The validity of a currency, irrespective of its material content, is based on the proclamation of the state. Money is related to the law, which regulates its use. Consequently Knapp encapsulates his theory as follows: *“Money always signifies a Chartal means of payment. Every Chartal means of payment we call money. The definition of money is therefore ‘a Chartal means of payment’*”<sup>182</sup>.

## 1.2 ALFRED MITCHELL INNES AND THE CREDIT THEORY OF MONEY.

Alfred Mitchell Innes (1864 – 1950) was a British diplomat and self-thought economist whose research was focused mainly on the nature of credit and money in modern economy. He wrote only two articles on economic theory<sup>183</sup> : *“What is Money?”* and *“Credit Theory of Money”* both published in *The Banking Law Journal*<sup>184</sup>.

Innes, just like Knapp, opposed the conventional monetary theory, according to which money derives its value through a link to precious metal, like gold or silver. Innes argued that this “metalist” approach is erroneous and that in reality money is just a form of credit. The nature of money is explained by what Innes called “credit theory of money”: *“(…) a sale and purchase is the exchange of a commodity for a credit. From this main theory springs the sub-theory that the value of credit or money does not depend on the value of any metal or metals, but on the right which the creditor acquires to ‘payment,’ that is to say, to satisfaction for the credit, and on the obligation of the debtor to ‘pay’ his debt, and conversely on the right of the*

<sup>181</sup> Knapp, G.F. (1924) *The State Theory of Money*, abridged and translated by H.E. Batson, London, Routledge & Kegan Paul, p.39

<sup>182</sup> Idem., p.38

<sup>183</sup> Those are *“the best pair of articles on the nature of money written in the twentieth century”* in the opinion of L. Randall Wray, *Credit and state theories of money: the contributions of A. Mitchell Innes*, p.223

<sup>184</sup> Alfred Mitchell-Innes: 'What is Money', *The Banking Law Journal*, May 1913, pp. 377–408  
Alfred Mitchell-Innes : 'The Credit Theory of Money', *The Banking Law Journal*, Vol. 31 (1914), Dec./Jan., pp. 151–168. Both articles were reprinted in L. R. Wray (ed.). 2004. *Credit and State Theories of Money: The Contributions of A. Mitchell Innes*, Edward Elgar, Cheltenham.

*debtor to release himself from his debt by the tender of an equivalent debt owed by the creditor, and the obligation of the creditor to accept this tender in satisfaction of his credit.*"<sup>185</sup>. The words "debt" and "credit" describe the same legal relationship considered from two different point of views : debtor's and creditor's'.

According to Innes, and contrary to the traditional approach, money was not created in order to facilitate the barter exchange of goods. The major weakness of the "barter theory" of money is its unrealistic assumption of the double coincidence of wants of both parties of the hypothetical market exchange<sup>186</sup>. Providing historical and archeological data, Innes argue that chronologically institution of credit preceded the apparition of what is sometimes referred to as commodity money. Operation of selling does not consist of exchange of some good or service for intermediate commodity called 'medium of exchange', but is rather an "*exchange of a commodity for a credit*"<sup>187</sup>.

Money, even backed by precious metals like gold, has not any intrinsic value. It is just a device that serves to record the credit transaction: "*A priceless gem or a worthless bit of paper may equally be a token of debt, so long as the receiver knows what it stands for and the giver acknowledges his obligation to take it back in payment of a debt due*"<sup>188</sup>. Money then is a recognition of a debt, a promise to pay by the debtor. Every object can play this role, as long as both the debtor and the creditor agreed upon the form: it can be a promissory note, shells, gold, silver, tally sticks or the government money.

Innes claims, however, that government money (it does not matter if its backed by gold or not) has a special status, that makes it quite different from other kinds of "money". It is due to confidence that community has credit in the government and the fact that state money is accepted by governments as a means of obligation discharge that citizens have towards the state: the tax payment. Tax obligation ensures that every citizen will desire some amount of governmental money. In other words, there will always be some demand for it because

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<sup>185</sup> Alfred Mitchell-Innes : 'The Credit Theory of Money', The Banking Law Journal, Vol. 31 (1914), Dec./Jan., p. 152

<sup>186</sup> For the anthropological critique of the barter theory of money, see : Graeber, D. (2012) Debt: The First 5,000 Years, Melville House

<sup>187</sup> L. R. Wray: *Conclusion: The Credit Money and State Money Approaches* in: L. R. Wray (ed.). 2004. Credit and State Theories of Money: The Contributions of A. Mitchell Innes, Edward Elgar, Cheltenham. 50–78), p.238

<sup>188</sup> Alfred Mitchell-Innes : 'What is Money', The Banking Law Journal, May 1913, pp. 377–408

obtaining the governmental money is the only possible way for the citizens to cancel the debt that they have towards the state.

### 1.3 POST-KEYNESIANS AND THE ENDOGENOUS MONEY THEORY

The origins of the endogenous money theory can be linked with the 19th century British Banking School and to economists such as Knut Wicksell and Joseph Schumpeter<sup>189</sup>. In its modern form the endogenous approach was developed by economists associated with the Post-Keynesian school, especially : Richard Kahn, Joan Robinson and Nicholas Kaldor<sup>190</sup>. A detailed presentation of the endogenous theory of money is beyond the scope of this work so in the following presentation I will focus only on the essential points.

According to the mainstream economic theories money supply is created exogenously, i.e. only through the initiative of the central bank (exogenously to financial market pressures). In this approach central bank has direct control over the supply of money. Post-Keynesian economists claim that this vision of money is not correct because the so-called monetary base or high-powered money (which includes coins, notes and commercial banks' reserves that are maintained in their accounts in central bank) constitutes only a small portion of money in circulation.

Most money in contemporary capitalist economies is created by private banks and financial institutions in response to the demand from the private sector. The loans create deposits, not the other way around. Every time when a new deposit account is created by the bank or a credit is given by the financial institution, new money is created (“credit money” or “debt money”)<sup>191</sup>. In other words, the fluctuations of the money supply are correlated with the private sector’s demand for it. Money supply is endogenous in the sense that incentives to

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<sup>189</sup> Howells, P. 2006. “The Endogeneity of Money: Empirical Evidence,” in P. Arestis and M. Sawyer (eds.), *A Handbook of Alternative Monetary Economics*. Edward Elgar, Cheltenham, UK and Northampton, Mass., p. 53

<sup>190</sup> King, J. E. 2002. *A History of Post Keynesian Economics since 1936*. Edward Elgar Publishing, Cheltenham, UK and Northampton, MA., p.161 and 166-167.

<sup>191</sup> Lavoie, M. 1996. “Monetary Policy in an Economy with Endogenous Credit Money,” in G. Deleplace and E. J. Nell (eds.), *Money in Motion: the Post-Keynesian and Circulation Approaches*. Macmillan and St. Martin’s Press, Basingstoke and New York. 532–545; Louis-Philippe Rochon and Sergio Rossi, “Endogenous Money: the Evolutionary Versus Revolutionary Views,” *Review of Keynesian Economics* 1.2 (2013): 210–229.

create new money come from within the private sector, and not from the monetary authority (the central bank)<sup>192</sup>.

#### 1.4 ABBA LERNER AND FUNCTIONAL FINANCE

Abba Lerner (1903 – 1982) was a prominent participant of the so-called Socialist Calculation Debate in which (together with other "neoclassical socialists", like Oskar Lange) he opposed Ludwig von Mises and Friedrich Hayek over the feasibility of the centrally planned economy. His most important contribution to the economic theory is his concept of "functional finance" developed for the first time in his article "Functional Finance and the Federal Debt"<sup>193</sup>.

Lerner rejected the concept of the so-called Sound Finance - that is the idea that the government income should always balance its expenditures. Government policies should always be judged from the point of view of their effectiveness in achieving the macroeconomic goals. The fact that those policies would be deficit-financed was, according to Lerner, secondary.

Lerner himself described the essence of the functional finance approach, as follows: *"The central idea is that government fiscal policy, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, shall all be undertaken with an eye only to the results of these actions on the economy and not to any established traditional doctrine about what is sound and what is unsound. This principle of judging only by effects has been applied in many other fields of human activity, where it is known as the method of science opposed to scholasticism. The principle of judging fiscal measures by the way they work or function in the economy we may call Functional Finance"*<sup>194</sup>.

According to Lerner, and contrary to advocates of the doctrine of the "sound finance", budget deficits are not inherently bad (nor good). They are totally justified if they help to achieve macroeconomic goals defined by the community, such as: full employment, low inflation, economic growth, prosperity, etc... Conversely, governments' actions (like borrowing,

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<sup>192</sup> According to on line English to English Oxford dictionary: Exogenous - Having an external cause or origin  
Endogenous - Having an internal cause or origin:

<sup>193</sup> Lerner, Abba P., "Functional Finance and the Federal Debt," Social Research 10 (February 1943): 38-51.

<sup>194</sup> Idem., p.39

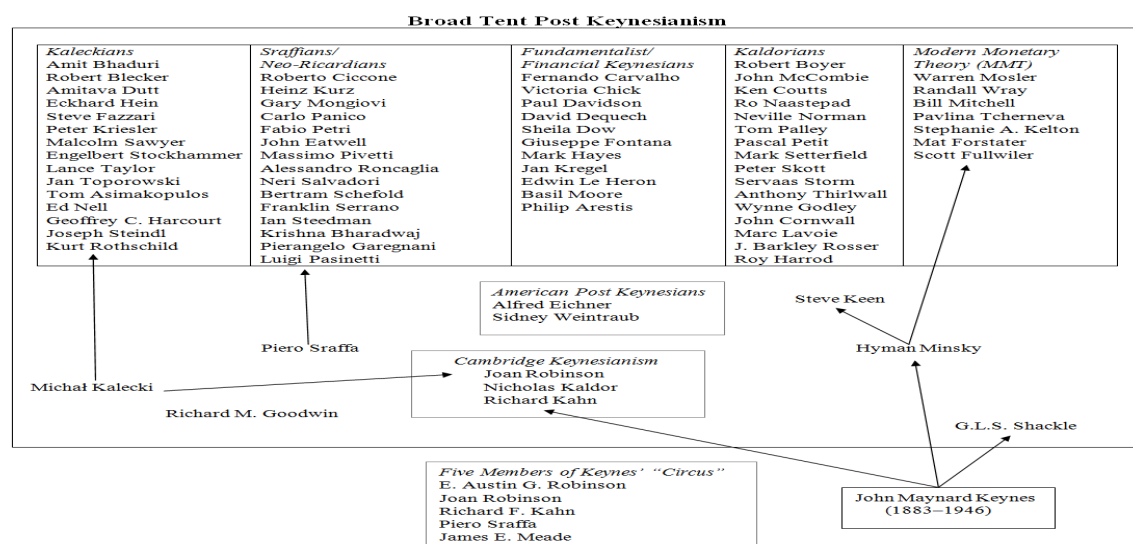
lending, taxing, spending, buying, or selling) that hinder those goals, would not be consistent with the principle of functional finance (i.e. they would be dysfunctional).

For Randall Wray, one of the most eminent advocates of the MMT, the functional finance approach to policy could be summed up in two following principles<sup>195</sup> :

1. If domestic income is too low, governments need to spend more (relative to taxes). Existence of unemployed labour force is a clear evidence that economy suffers from insufficient demand and, therefore, governments should start spending (and/or lower the taxes).
2. If the domestic interest rates are too high, it means that the government should lower them by increasing the money supply (in form of the bank reserves).

In the second section I will elaborate what, according to Lerner and proponents of the MMT, the functional finance approach to government economic policy would look like in practice.

I will conclude this section with a diagram showing various subgroups in Post- Keynesian economics and a place of the MMT in the so-called “broad tent” Post-Keynesianism:



Source: Blog Social Democracy for the 21st Century: A Post Keynesian Perspective THE: Post Keynesian Economics: A Revised Diagram (posted on Tuesday, April 15, 2014)

<sup>195</sup> L. Randall Wray (2012): Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, Palgrave Macmillan 2013, p. 193-194.



## 2. MAIN CONCEPTS OF THE MODERN MONEY THEORY

The theoretical components presented in the first section were integrated into the new macroeconomic theory, called Modern Money Theory (MMT) that goes well beyond the original concepts of Knapp, Mitchell-Innes, Lerner, and proponents of the endogenous money theory. Today MMT can be classified as an independent macroeconomic theory or as a part of the “broad tent” of Post Keynesianism<sup>196</sup>.

The most important advocates of the MMT today are the following: Randall Wray, William "Bill" Mitchell, Pavlina Tcherneva, Mat Forstater, Warren Mosler and Scott Fullwiler. MMT is associated with the work of the economic department of the University of Missouri in Kansas City and private think tanks, like the Center for Full Employment and Price Stability, the Jerome Levy Economics Institute and the Centre of Full Employment and Equity.

The main goal of the Modern Money Theory is to explain how currency issued by monetarily sovereign governments functions in contemporary economies. In the following section I will present the main theoretical buildings blocks of the MMT.

### 2.1 MACRO ACCOUNTING

The economists from MMT are working in the sectoral balances (also known as sectoral financial balances) analytical framework, developed by a British economist Wynne Godley<sup>197</sup>. The national economy in this approach is divided into three main financial sectors: government, the foreign financial sector and the private financial sector. The differences in expenditures and incomes among those sectors are called “financial balances”.

The sectoral balances framework is linked to another theoretical contribution of Godley - the concept of Stock-Flow Consistency (SFC). The notions of “stocks” and “flows” are often

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<sup>196</sup> For instance Mark Hayes (Secretary of the Post Keynesian Economics Study Group) consider MMT as a branch of Post Keynesian economics. Lecture of Mark Hayes, “The Post Keynesian (Policy) Difference” 2010 available online: <http://people.ds.cam.ac.uk/mgh37/HayesMcCombie191010.mp3>

<sup>197</sup> Wynne Godley and Marc Lavoie, 2007. *Monetary Economics: An Integrated Approach to Credit, Money, Income, Production and Wealth*, Palgrave MacMillan.

confused, but the distinction between them is central for the SFC approach to economics”<sup>198</sup>. A “stock” refers to a quantity that is measurable at a particular point of time (for instance, the 1st of January of 2013), and therefore includes also quantities that were accumulated in the previous periods. A “flow” refers to a quantity that is measured with reference to a period of time (length of time), like an hour, a day or a year. Budget deficit would be an example of a flow (difference between government’s income and expenditure per fiscal year) while public debt would be an example of a stock (accumulated budget deficits). The main idea behind the Stock-Flow Consistency (SFC) approach is that in a closed economy, every net increase in one stock must be equal to a net decrease in another stock (and equal to the net flow into it).

By applying Godley’s concepts of Stock-Flow Consistency (SFC) and sectoral balances, Randall Wray listed the following basic principles that apply to macroeconomic accounting<sup>199</sup>:

1. One’s financial asset is another’s financial liability – Financial assets and financial liabilities are two sides of the same coin and for the economy considered as a whole they offset each other. For instance, a governmental bond is an asset for a buyer (household or private financial institution) but a liability for its issuer (the government). In the same manner the demand deposit is an asset for household and a liability for a bank.

This rule does not apply to real assets (nonfinancial wealth like cars or real estates) which are not offset by somebody else’s liability.

2. “Inside wealth” versus “outside wealth” – in a closed economy, with only the private and public sector, the financial assets and liabilities issued by the private sector (“inside wealth”) necessarily cancelled each other. One household’s asset is another’s liability - they sum up to zero. For the private sector to accumulate financial wealth, it needs to be in a form of financial claims on the public sector (“outside wealth”) – like governmental bonds.

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<sup>198</sup> According to Michał Kalecki: "(economics) it is the science of confusing stocks with flows. It is this confusion that has kept the Quantity Theory of Money alive until today. "cited by Joan Robinson in Robinson J., "Shedding Darkness", Cambridge Journal of Economics, 6 (1982), 295–6.

<sup>199</sup> L. Randall Wray (2012): *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems*, Palgrave Macmillan 2013, p. 1-6.

3. Net private financial wealth equals public debt – stock of private financial wealth by accounting identity must be equal to stock of public liabilities (i.e. public debt). The private sector is able to accumulate its financial claims on public sector only because annual flow of government liabilities (budget deficit) to the private sector is larger than the flow of private liabilities to the public sector. In other words, the private sector is spending less than its income. The logical consequence of this accounting rule is that it is impossible for both the public and private sector to save (to run a surplus) simultaneously.

4. The rest of the world's debts are domestic financial assets – We can complicate our macroeconomic model by introducing the third sector – “The Rest of the world” (ROW then includes foreign households, governments, etc...). In this case it would be possible for the domestic private sector to accumulate the net financial wealth (by issuing the debt to ROW) even if the domestic governmental sector would run a balanced budget.

The obvious conclusion that we can drive from the above macro accounting principles is that one sector's deficit must be equal to another sector's savings (i.e. its surplus). In our three-sector-model the surpluses and deficits of each sector must necessarily cancel each other.<sup>200</sup> :

$$\text{Domestic Private Balance} + \text{Domestic Government Balance} + \text{Foreign Balance} = 0$$

For more clarity we can divide each sector into sub-categories, but it will not change the main principle:

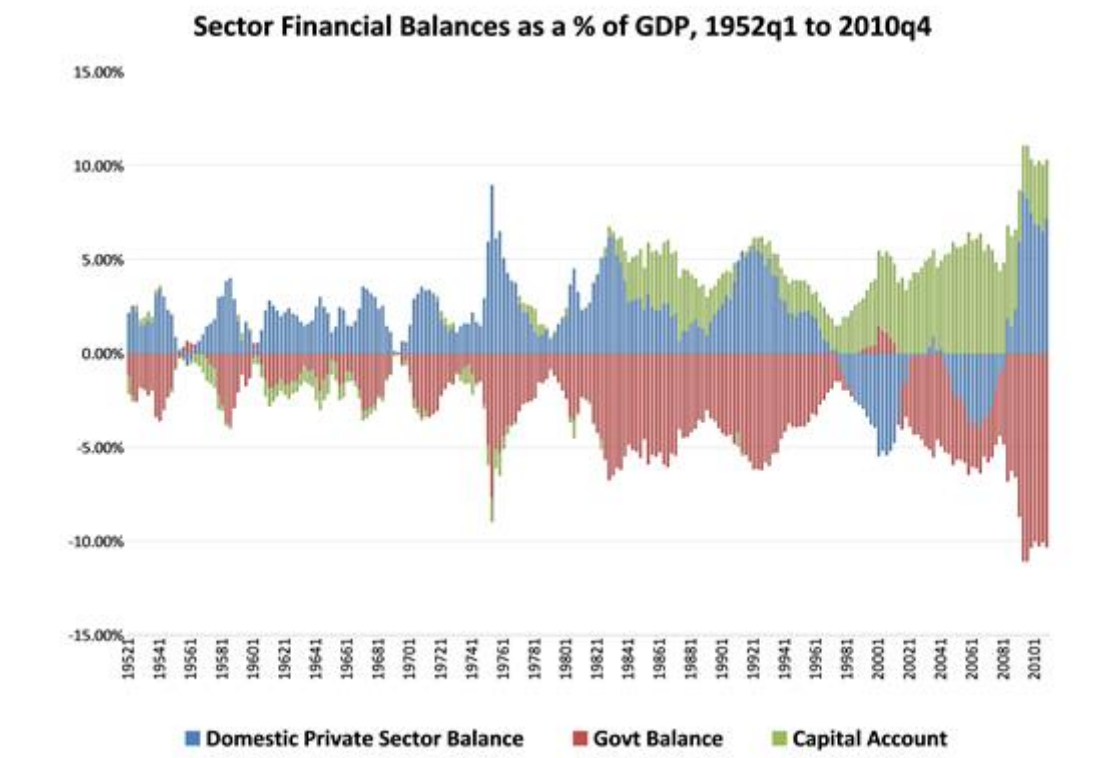
$$(\text{Saving} - \text{Investment}) + (\text{Taxes} - \text{Government Purchases}) + (\text{Imports} - \text{Exports}) = 0$$

From the above identity it should be obvious that it is impossible for every sector to run a surplus at the same time. If one sector is saving, then at least one other sector will have to run a deficit.

The following figure, that shows sector financial balances as a percentage of GDP, perfectly illustrates macro accounting principles discussed in this section :

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<sup>200</sup> L. Randall Wray(2012): Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, Palgrave Macmillan 2013, p. 5



Source: L. Randall Wray: *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems*, Palgrave Macmillan 2013, p. 29

As we can see in this graph, deficit of any given sector has almost a perfect mirror image in form of the other sector's surplus. The sum of all the surpluses and deficits will always net out to zero.

## 2.2 THE NATURE OF MONEY

One of the main theoretical contributions of MMT is to provide an alternative explanation about the origins, nature and the creation of money. Traditional economics textbooks give a functional definition of money, i.e. definition that attribute to money some functions and therefore responds to a question “what does money do?”. And so, arguments go, money functions as a medium of exchange (to buy goods and services), as a store of value, as a means of payment and finally – as a unit of account that can be used to measure prices, wealth, etc...

Proponents of MMT try to go beyond this standard interpretation and, by integrating the insights of Georg Friedrich Knapp and Alfred Mitchell Innes, they construct the theory of the nature of the modern money (therefore they try to respond to the question “what is money?”).

Mainstream economists do not attribute to money any special role in their theoretical models<sup>201</sup>. Indeed, money functions only as a “neutral veil” over the real economic activities and therefore can only influence the nominal magnitudes (first of all inflation) but not real variables (like the level of output or unemployment)<sup>202</sup>. Historically, money was introduced in order to temper the inconvenience of the barter exchange, and its value was based on the precious metals like gold or silver (the metalist approach to money discussed in the section 1.1.1)

In sharp contrast with this orthodox approach, the MMT economists claim that money is crucial to understanding the contemporary economic system. Following the work of Innes, MMT treat money as a form of credit, or more specifically, as a debt relation between two economic agents (“*money express a social relation*”<sup>203</sup>). In other words, money is a balance-sheet operation in which “*debt (promise or IOU<sup>204</sup>) is held as an asset by the creditor and as a liability by the debtor. The creation of money, then, is simply the balance sheet operation that records this social relation*”<sup>205</sup>. Money is at the same time an asset (from a creditor’s point of view) and a liability (from a debtor’s point of view).

A useful distinction needs to be made here between two different concepts:

- “abstract money of account” (measuring unit) – a general, representative unit of account which is neither physical nor concrete. Money of account is a *numéraire* in which other goods, services and debts are measured (examples of money of account include US Dollar, Brazilian Real, British Pound, etc...)

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<sup>201</sup> Lecture of Victoria Chick: Why don't Economists understand money?, on Positive Money Conference in University College London, (January, 2013). <http://www.youtube.com/watch?v=EObtwpxDSzk>

<sup>202</sup> Louis-Philippe Rochon and Sergio Rossi, “Endogenous Money: the Evolutionary Versus Revolutionary Views,” *Review of Keynesian Economics* 1.2 (2013): 210–229.

<sup>203</sup> Foley, Duncan. 1989. “Money in Economic Activity.” *The New Palgrave: Money*, edited by John Eatwell, Murray Milgate, and Peter Newman. New York and London: W.W. Norton, p. 519-525.

<sup>204</sup> IOU (abbreviation of the phrase “I owe you”) - An informal document that acknowledges a debt owed.

<sup>205</sup> Bell S. The Hierarchy of Money, The Jerome Levy Economics Institute, Working Paper No. 231

- “money things” – are denominated in the abstract money of account. “Money things” are measured by the money of account. They can have a physical form (coins, bank notes, etc...) or not (like electronic entries on the balance sheets in case of bank deposits)<sup>206</sup>.

The money things are just part of the larger category of IOUs (“I Owe You”) that are recognised debts (liabilities). Everybody can issue the IOUs – individuals, households, banks, etc... The essence of the obligation of the issuer of each IOU is to “*accept back its own IOU when it is presented*”<sup>207</sup>. Otherwise it would mean that the issuer of IOU’s defaulted, because “*refusing your own debt when submitted for payment is a default*”<sup>208</sup>.

The following example can illustrate how “money things” (and more broadly all IOU’s) are created. Person A borrows from person B one bottle of milk and recognises their debt by writing on a piece of paper : “I owe to B a bottle of milk. I will give it back to B in one month”. This recognition of debt is an IOU issued by person A. This document is an asset of B and a liability of A (creation of “money things” is a balance-sheet operation). If B presents that IOU to A in one month, A’s obligation will be to give a bottle of milk to B. If they refuse to accept their own IOU, they will default.

Let us sum up this section with the following propositions that proponents of the MMT make about the nature of money<sup>209</sup> :

1. Contrary to the neoclassical theory, real world economy is not a quasi-barter system. The capitalist system is much more similar to what Keynes called “monetary production economy”, or to what Karl Marx called “general formula for capital”(M-C-M’). Money is at the same time the mean and the ultimate goal of the capitalist mode of production. Therefore, the neoclassical barter paradigm needs to be rejected and money should be explicitly incorporated into the economic models.

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<sup>206</sup> L. Randall Wray(2012): Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, Palgrave Macmillan, p. XV

<sup>207</sup> Idem., p. 275

<sup>208</sup> Idem., p. 275

<sup>209</sup> Idem., p. 264

2. Money is not a physical thing – it does not need any physical support (like gold for example). Money is an IOU – a recognition of debt. It constitutes, at the same time, a financial asset of its holder and financial liability of its issuer.

3. Money-things are not equal. In fact, they represent “differing degrees of acceptability”<sup>210</sup>, and therefore we can organise them hierarchically - from the most acceptable till the least, depending on the issuer of given money things. I will develop the concept of the hierarchy of money in the next section.

## 2.3 MONETARY SOVEREIGN GOVERNMENTS

As we saw in the preceding section, IOUs are created when somebody is willing to accept somebody else’s debt. As Hyman Minsky noticed, money is not an exception - *“everyone can create money; the problem is to get it accepted”*<sup>211</sup>. Everybody can create a unit of account and then denominate liabilities in that unit of account but there is no guarantee that it will be accepted by other agents.

From this point of view, governments hold a privileged position in comparison with individuals, households, private enterprises, etc... In contrast to other potential creators of money, governments can assure that there will always be a demand for money created by them. This can be achieved by all the kinds of financial charges imposed by the state on its citizens.

One of the most important theoretical insights of the MMT is the concept of the “Tax-driven money” (TDM) that explains why the money created by the state is so widely accepted: *“(TDM) refers to the idea that the power of the State (or other political authority) to impose a tax (or similar) liability payable in its own currency is sufficient to create a demand for that currency and give it value”*<sup>212</sup>.

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<sup>210</sup> Foley, D. (1987) Money in economic activity, pp.519 – 25 in Eatwell, J., Milgate, M. and Newman, P. (eds), The New Palgrave: Money, New York and London, W.W. Norton

<sup>211</sup> Minsky, Hyman P. 1986. Stabilizing An Unstable Economy. New Haven: Yale University Press, p.228

<sup>212</sup> Forstater M. Tax-driven money: additional evidence from the history of economic thought, economic history and economic policy, (in:) Setterfield M. (ed.) Complexity, Endogenous Money and Macroeconomic Theory: Essays in Honour of Basil J. Moore, Edward Elgar Pub(2006), p.203

This rule applies only to the governments that are “*monetary sovereign*”, i.e. the ones that issue its own currency and have debts denominated in this currency. For instance, in the MMT approach the country members of the Economic and Monetary Union (EMU) that adopted the same currency (EURO) are not monetary sovereign (the control over the money supply was transferred to the European Central Bank). Also, the countries with exchange rate policies of pegging the central bank's rate of exchange to another country's currency are not “*monetary sovereign*” in the MMT understanding. This is because such countries always need to accumulate huge amounts of foreign reserves (i.e. foreign currency) to maintain the peg. This in turn, considerably restrains the domestic policy space for governments.

In the MMT approach there is a crucial difference between the *issuer* of the currency and the *user* of the currency. Monetary sovereign governments are the only issuers of the currency. All other agents, like households, private companies, members of the Eurozone and countries with pegged currencies are *using* the currency issued by the government<sup>213</sup>. The issuers of the currency (contrary to the users of the currency) are not revenue constrained – they can create money at will (“out of thin air”).

According to MMT proponents, circulation of fiat money looks as follows: Every time when governments purchase some goods or services from the private sector – new money is created. By crediting banking accounts of the private sector, government “*spends currency into existence*”.<sup>214</sup> Conversely, when the governments are debiting the bank accounts of the private sector (for example, when the taxes are being collected) money is destroyed. As we can see, the process of creation (and destruction of money) is simply a bookkeeping operation – no real resources (like gold for example) are involved.

The analysis of the fiat money creation process, drives the MMT economists to the conclusion that monetary sovereign governments are not revenue constrained. In other words, such a government does not need to collect taxes or borrow any amount of money in order to spend. In fact, governments first need to spend (by crediting the private sector bank account) in order to later collect the taxes (by debiting the private sector bank account).

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<sup>213</sup> To be more precise : currency is issued by the central banks, but MMT analyses the consolidated public sector (government and central banks)

<sup>214</sup> Éric Tymoigne and L. Randall Wray, Modern Money Theory 101: A Reply to Critics, The Levy Economics Institute Working Paper No. 778, November 2013



According to MMT economists taxes do not finance the public spending, but they do carry other important functions. First of all, they create a demand for a currency issued by the monetary sovereign governments. Secondly, taxes can be useful tools for achieving socially desirable goals, like redistribution of wealth through progressive taxation policies. Thirdly, taxes are used in order to balance the aggregate demand and aggregate supply, and therefore to constrain the inflationary pressures.

Similarly, the monetary sovereign governments do not need to borrow money from the financial institutions by issuing the governmental bonds. According to the MMT proponents issuing of the bonds is just a monetary policy operation that helps the central bank to achieve the overnight interest rate target<sup>215</sup>. When there is too much excess of reserves in the banking system, the government can issue the bonds and sell them to private banks, and therefore drain the liquidity from the banking system. Private banks will always agree to buy those new bonds because they offer a better rate of return than the reserves. If, on the other hand, there is not enough reserves in the system, the central bank will buy governmental bonds from private banks (open market operations) and therefore will inject liquidity into the banking system.

## 2.4 REAL CONSTRAINTS TO PUBLIC SPENDING

The MMT explains how money is created in the modern fiat money economy. It concludes that monetary sovereign governments, that are the only *issuers* of the currency (other economic agents are *users* of the currency issued by the government), do not face any affordability constraints. In other words, those governments can afford to buy every good and service that is for sale in the currency that they issue. However, to say that government can afford to spend, does not imply that they should spend. In reality, the proponents of the MMT point out a number of factors that constrain government spending<sup>216</sup>.

First of all, public spending faces the inflation constraints. One of the common misconceptions about the MMT concerns its supposed lack of concern with price stability. In fact, the MMT economists admit that public spending can induce the demand pull inflations. This can occur when the aggregate demand in a given economy exceeds the aggregate supply.

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<sup>215</sup> Overnight interest rate is the interest rate at which large banks borrow money, short term, among themselves.

<sup>216</sup> L. Randall Wray(2012): Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, Palgrave Macmillan, p. 188

In other words, inflation will increase when the spending (public or private) exceeds the capacity of the real economy. This turning point is full employment of real resources and labour force: *“inflation occurs when there is chronic excess demand relative to the real capacity of the economy to produce”*<sup>217</sup>. If there are still some idle resources in the economy, inflation should not be a problem. In any case, the state can levy new taxes on its citizens and therefore tax away an excess demand.

Secondly, public spending may, in some circumstances, increase the demand for imported goods and services, disrupt the trade balance, and, in consequence, put the downward pressure on the exchange rates.

Thirdly, it is neither necessary, nor desirable for government to take up the responsibility for the whole economic activity. Therefore, in planning the sizes of its budget governments should take into account real capacities of the economy, because increased public spending can simply leave too few available real resources for the private sector.

Lastly, governments are often constrained by budgeting procedures and debt limits. It is important to acknowledge, however, that a budget constraint is a legislative limit on the amount of national debt that can be issued by governments. In other words, government budget and the size of the budget deficit is a political choice, that can always be revised in a legislative procedure.

### **3. POLICY FOR FULL EMPLOYMENT AND PRICE STABILITY**

In the first section of this chapter I presented an intellectual family tree of the Modern Money Theory. We saw that MMT is a very original synthesis of the very economic theories, like Functional Finance, Chartalism, the credit money theory and some insights of the Post-Keynesian school. In the second section I dealt with some crucial concepts of MMT (descriptive component of the theory). In the following section I will present the normative component of the MMT, that is the most important policy recommendation of the MMT adherents – the employer of last resort (ELS) or the job guarantee(JG) program.

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<sup>217</sup> Mitchell, W. Modern monetary theory and inflation – Part 1, Bill Mitchell – billy blog. Modern Monetary Theory... macroeconomic reality (entry date: 23.01.2015)

Proponents of the MMT claim that they adequately describe the reality of the modern monetary economies based on the fiat currency. The governments that are monetary sovereign play a crucial role in this system because they are the only producer of the currency. In other words, governments have a monopoly position in creation of the *unit of account* (Dollars, Pounds, Reals, etc...) and the *money thing* in which private companies and citizens can discharge their obligation towards the government (i.e. to pay taxes).

In section 1.2 I was trying to show that this monopolistic position of the government as money creator (as defined above) assures that, contrary to other economic agents, they do not face affordability constraints. As Randall Wray put it himself: “(...)sovereign issuer only faces self-imposed constraints. These are human-made, not economic, rules. The market does not and cannot impose affordability constraints on government that issues its own currency”<sup>218</sup>. Monetary sovereign governments can always create new money – we saw earlier that the fiat money is created when the government spends i.e. credits the private accounts. Conversely, fiat money is destroyed when households and private companies pay their taxes, i.e. when governments debit the private accounts.

The fact that governments are not revenue constrained means that they enjoy large fiscal policy space (they are limited by other factors, like inflation or self-imposed political constraints). Governments can afford to buy any kind of goods and services that are for sale in the national currency, simply because they can never run out of its own currency. This policy space assures that monetary sovereign governments can pursue, what MMT economist call a “public purpose” – a socially desirable goal, defined by society in democratic procedures.

The MMT founders consider that fiscal and monetary policy of the state should be committed to achieving two such public purposes, namely full employment and price stability.

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<sup>218</sup> L. Randall Wray: MMT as an alternative to austerity, Blog : Great Leap Forward : Economic for the 21st Century and Beyond. <http://www.economonitor.com/lrwrap/mmt-as-an-alternative-to-austerity/> (entry date : 27 January 2015)

### 3.1 JOB GUARANTEE – EMPLOYER OF LAST RESORT

The most important message of the MMT is that a monetary sovereign government with floating exchange rate can afford to buy everything that is for sale in the national currency. Given that the wage earners offer their services in the national currency, the government can afford to buy all idle labour force in the country, by offering a public sector job to anyone willing and able to work.

The idea that government should provide a universal job program for its citizens has been called interchangeably in the MMT literature: Job Guarantee (JG), Public Service Employment (PSE), Buffer Stock Employment (BSE) or Employer of Last Resort (ELR). They all express the same idea, namely that government is able to provide full employment and price stability at the same time.

The concept of Employer of Last Resort was developed by a Post-Keynesian economist Hyman Minsky and then successfully integrated into the MMT synthesis. According to Minsky the ELR program can create *“an infinitely elastic demand for labor at a floor or minimum wage that does not depend upon long- and short-run profit expectation of business. Since only government can divorce the offering of employment from the profitability of hiring workers, the infinitely elastic demand for labor must be created by government”*.<sup>219</sup>

The main idea behind the program is very simple. Since capitalist economies are subject to periodic crises, they fail to achieve and maintain levels of full employment. Monetary sovereign governments can create enough public jobs to absorb all available labour supply. The JG/ELR program would not only eradicate the unemployment, but would also contain the inflationary pressure.

In the form proposed by the MMT scholars, the JG/ELR program would have the following characteristics<sup>220</sup>:

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<sup>219</sup> Minsky, Hyman. 1986. *Stabilizing and Unstable Economy*. New Haven, CT: Yale University Press, p. 306

<sup>220</sup> Tcherneva, P. (2012) *Beyond Full Employment: The Employer of Last Resort as an Institution for Change*, The Levy Economics Institute Working Paper No. 732, p.3

1. JG/ELR Offers an Infinitely Elastic Demand for Labor: this means that the ELR/JG program would be operational independently of the business cycle phase. It would hire more workers during the depression and less during the expansion, but it would always be operational : every citizen independently of their work experience, race, age, or gender would be entitled to a JG/JLR job. It is obvious that private sector agents (users of the currency) cannot offer infinitely elastic demand for labor, and government (the user of the currency) needs to step in.
  
2. JG/ELR Hires off the Bottom: although MMT is considered to be part of the “broad tent” of the Post-Keynesian school, its proponents reject the traditional Keynesian solution for the unemployment problem. The mainstream Post-Keynesian response for crises is well summed up by Paul Davidson : “*Government fiscal policy is conceived as the balancing wheel, exogenously increasing aggregate demand whenever private sector spending falls short of a full employment level of effective demand and reducing demand if aggregate demand exceeds the full employment level*”<sup>221</sup>. The MMT rejects this traditional Post-Keynesian policy recommendation, because general demand expansion does not address the counter-inflation directly and environmental concerns<sup>222</sup>. It also does not give a guarantee to create employment opportunities for the most disadvantaged members of the society and does not take into account the spatial labour market disparities<sup>223</sup>. As an alternative to this generalized Keynesian expansion, MMT propose the “bottom-up approach”, that is direct job creation by the government. Pavlina Tcherneva claims that JB/ELR programs would have an advantage of “*creating employment safety-net to those individuals who tend to be hired last and fired first from private sector work — normally the least skilled and least educated*”<sup>224</sup>, which would not be necessary a case in the traditional Keynesian “pump priming”.
  
3. JG/ELR Operates as a Buffer Stock: During recession all the people laid-off from the private sector would immediately and unconditionally find a job in the JG/ELR

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<sup>221</sup> Davidson, P. (1994), *Post-Keynesian Macroeconomic Theory: A Foundation for Successful Economic Policies for the Twenty-first Century*, Aldershot, UK and Brookfield, US: Edward Elgar, p. 79

<sup>222</sup> Mitchell, W. & Muysken, J. (2008) *Full Employment Abandoned: Shifting Sands and Policy Failures*, Edward Elgar Publishing, p. 241

<sup>223</sup> Idem., p. 241

<sup>224</sup> Tcherneva, P (2012) “Employer of Last Resort.” In J. King (ed.), *Elgar Companion to Post Keynesian Economics*, Northampton, MA: Edward Elgar, 161

program. When the economy starts growing again, those people will search for jobs in the private sector that offers better wages. So JG/ELR would function as a kind of automatic stabiliser – government spending would increase automatically during the recession, and during the boom budget deficit would shrink.

4. JG/ELR Pays a Fixed Living Wage: all the workers that cannot find employment in the private sector will be offered a wage level close to the existing minimum wage. Furthermore, the government will provide a package of welfare benefits, such as healthcare, childcare, sick leave, vacation. One of the most important direct consequences of implementing the concept of job guarantee would be effective replacement of the minimum wage legislation with wage set in JG/ELR. This is evident, since workers could always change the private sector job offering low wages for the job in the JG/ELR program.
5. JG/ELR Maintains and Enhances Human Capital: long-term unemployment has well known negative effects for the workers, mainly loss of skills and demoralisation. In consequence, the long-term unemployed become unemployable, even during the boom when the private sector is finally starting to hire. By offering a job to everybody who is ready, willing, and able to work, government assures a smooth transition from the JG/ELR program to the private sector.
6. JG/ELR Employees Perform Valuable Work: MMT economists claim that there would always be enough meaningful opportunities to efficiently use the idle labour force. According to Wray, in designing the JG/ELR program we should take into account the potential impact on the private sector : “(...)we probably would want to undertake activities that are not currently undertaken by profit seeking firms, nor would we want to take job prospects away from the currently employed”<sup>225</sup>. Wray also gives an overview of the potential type of jobs that would be provided by government (which could be characterised as labour-intensive employment)<sup>226</sup>.

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<sup>225</sup> Wray, R. L. (2006) Understanding Modern Money: The Key to Full Employment and Price Stability, Edward Elgar Publishing, p. 142

<sup>226</sup> Companion (to elderly, orphans, mentally or physically disabled, etc.), public school classroom assistants, safety monitors, neighbourhood cleanup/Highway cleanup engineers, low-income housing restoration engineers, day care assistants for children of JG/ELR workers, library assistants, environmental safety monitors, JG/ELR artist or musician, community or cultural historian, restoration of public infrastructure, expansion of public services.

Some opponents of the MMT claim that JG/ELR workers would produce zero private market value. For instance, Sawyer points out that if the wage was higher than productivity in the JG/ELR program, then the ELR workers would make “*net claims on the rest of the economy [and] that the net claims . . . are greater than those currently made by the unemployed*”<sup>227</sup>. But as Billy Mitchell rightly pointed out, “*(JG/ELR) workers would deliver positive contributions to the community (positive social value)*”, meaning the goods and services that are not produced by the private sector but nevertheless are valuable for the society (for example safety monitors in schools surroundings)<sup>228</sup>.

7. JG/ELR Operates with Loose Labor Markets: JG/ELR should not compete for the workforce with the private sector. As I mentioned earlier, it will operate as an automatic stabiliser, which means that the number of the employed workers will depend on the overall state of the economy. More workers would be employed during the slump, less when economy is expanding and the private sector is hiring again. This feature of the JG/ELR program poses some organisational problems: “*JG jobs would have to be productive yet amenable to being created and destroyed in line with the movements of the private business cycle*”<sup>229</sup>. This difficulty may be overcome by splitting the JG/ELR program into the core component “*that represents the average buffer stock over the typical business cycle given government policy settings, the trend in private spending growth, and a mismatch of labour force characteristics and employer preferences*”<sup>230</sup>) and a transitory component “*that fluctuates around the core as private demand ebbs and flows*”<sup>231</sup>.

8. JG/ELR Is Financially Sustainable over the Long Run in Sovereign Currency Nations:  
In the second section of this chapter I tried to show that monetary sovereign government with floating exchange rates does not face affordability constraints. Such

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<sup>227</sup> Sawyer, M. (2003), “Employer of last resort: could it deliver full employment and price stability?”, *Journal of Economic Issues*, 39, p. 895

<sup>228</sup> Mitchell, W. & Muysken, J. (2008) *Full Employment Abandoned: Shifting Sands and Policy Failures*, Edward Elgar Publishing, p.250-251

<sup>229</sup> Mitchell, W.F. and L.R.Wray (2005), “*In defense of employer of last resort: a response to Malcolm Sawyer*”, *Journal of Economic Issues*, 39(1), p. 239

<sup>230</sup> Mitchell, W. & Muysken, J. (2008) *Full Employment Abandoned: Shifting Sands and Policy Failures*, Edward Elgar Publishing, p. 248

<sup>231</sup> Idem., p. 248

a government does not need neither to collect the tax nor to borrow money (by issuing the bonds) in order to spend. So far as there are unemployed workers willing to work, the government can always afford to hire them. It is also worth noting that estimated costs of introducing the universal JG/ELR program in the United States would be under 1 % of GDP<sup>232</sup>.

9. JG/ELR Is an Institutional Vehicle to Achieve Other Socioeconomic Goals: The main goal of the JG/ELR program is to provide full employment and price stability. But advocates of this solution claim that there would be additional advantages. Wray points out that the JG/ELR program would improve working conditions in the private sector. Just like in the case of the wage level (let us remember that wages fixed in JG/ELR become effectively the minimum wage), the working conditions<sup>233</sup> provided in government-created jobs, would become “the minimum working condition”. The reason for this is simple – the private sector would have to offer working conditions at least as good as in JG/ELR. Otherwise workers would simply switch to a JB/ELR job<sup>234</sup>. Full employment would also eliminate, or at least considerably reduce, the informal sector<sup>235</sup>. Full employment would also reinforce the fight against the discrimination based on race, sex, religion, since unfairly treated workers would always have a possibility of working in the JG/ELR program<sup>236</sup>. Forstater and Pollin suggested that the JG/ELR program, combined with massive public investments, can take a form of the Green New Deal and Green Jobs Corps<sup>237 238</sup>.

### 3.2 PRICE STABILITY

The MMT economists claim that monetary sovereign governments can afford to directly create jobs for all idle labour force in the country (JG/ELR program). Moreover, they claim

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<sup>232</sup> Harvey, P. (1989), “Securing the Right to Employment: Social Welfare Policy and the Unemployed in the United States”, Princeton, NJ: Princeton University Press

<sup>233</sup> Paid vacations, work-life balance, rest periods, and work schedules, etc...

<sup>234</sup> Wray, R. L. (2012) *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems*, Palgrave Macmillan, p.223

<sup>235</sup> Idem, p.223

<sup>236</sup> Idem, p.223

<sup>237</sup> Forstater, M. 2004. “Green Jobs: Addressing the Critical Issues Surrounding the Environment, Workplace and Employment.” *International Journal of Environment, Workplace and Employment* 1 (1): 53–61.

<sup>238</sup> Pollin, R. (2012), “Back to Full Employment”, The MIT Press.



that a properly designed full employment policy would not generate any inflationary pressures.

As I already discussed in the second chapter, the 1970s marked a clear rupture in governments' attitude towards the unemployment problem. Virtually all governments of the industrialised countries abandoned their commitment to full employment. The role of the fiscal policies was

downgraded and an absolute priority was given to monetary policies conducted by the independent central banks.

Guided by the monetarist economic theory, central banks focused mainly on maintaining price stability, i.e. on keeping the inflation as low as possible. According to Mitchell and Muysken this new policy framework can be called inflation targeting, i.e. a situation where “*central bank explicitly and publicly declares a target inflation (or price) quantum and changes short-term interest rates to manipulate economic activity (and inflationary expectations) in order to maintain actual inflation within the pre-announced target, which may be represented by an acceptable range*”<sup>239</sup>. This monetary policy is based on the concept of NAIRU (Non-Accelerating Inflation Rate of Unemployment) briefly discussed in the first chapter.

The NAIRU concept refers to the idea that in every given economy there is some “natural level” of unemployment that is associated with stable prices – the inflation will accelerate if the unemployment rate falls below the NAIRU level. On the economic policy level this means that unemployment cannot be reduced by the monetary stimulus below the NAIRU level without increasing the level of inflation. In the NAIRU monetary policy framework “*the unemployment pool is thus widely recognized and monitored as a price anchor, a primary concern for price stability in general, and a prime object of monetary policy*”<sup>240</sup>. Just as Joan Robinson argued, in the modern capitalist economies idle labour constitutes an inflation control device.

While it can be argued that NAIRU is an effective policy tool in maintaining the price stability, it also imposes considerable costs on the whole economy in terms of lost output and

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<sup>239</sup> Mitchell, W. & Muysken, J. (2008) Full Employment Abandoned: Shifting Sands and Policy Failures, Edward Elgar Publishing, p. 148

<sup>240</sup> Idem., p. 229

unemployment. This is why the MMT economists strongly reject the NAIRU concept as a guide to macroeconomic policies and propose to replace it with Non-Accelerating Inflation Buffer Employment Ratio (NAIBER).

The idea of the NAIBER was first introduced by William Mitchell and was inspired by the Wool Floor Price Scheme introduced by the Australian Government in 1970s. The main idea of the Australia's wool price stabilisation program was to stabilise prices and incomes in the agricultural sector. The government was purchasing wool from farmers when the demand was low and selling it when the demand was high.

According to Mitchell, the JG/ELR program would be organised along the similar lines<sup>241</sup>. The government would offer a floor wage for every adult person, able and willing to work. In other words, the government would buy the idle labour during recession for the JG/ELR wage. During the boom, when the labour demand of the private sector rises, the government sells the "labour stock" for any price above the JG/ELR wage.

The MMT economists claim that maintenance of a variable buffer stock of jobs would be a more socially desirable inflation control tool than the current inflation-first policy of the central banks. Both NAIRU and NAIBER approaches are based on the idea of so-called inflation anchors and buffer stocks. Under the NAIRU regime inflation is controlled by a tight monetary policy of the central bank. The stocks of unemployed labour constitute the tool that keeps the discipline in the labour market and prevents excessive wage demands of the workers. In the NAIBER approach the pool of workers employed in the JG/ELR program constitute an inflation anchor.

Mitchell defines the buffer employment ratio (BER) as ratio of Job Guarantee employment (JGE) to total employment (E) :

$$BER = JGE/E$$

He claims that the JG/ELR program has an in-built inflation control mechanism. During the recession rising BER would reduce the real wage demands. When economy is expanding and

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<sup>241</sup>W. & Muysken, J. (2008) Full Employment Abandoned: Shifting Sands and Policy Failures, Edward Elgar Publishing, p. 230-231.

the inflation is rising faster than it is desirable, the government can use tighter fiscal and monetary tools to increase the BER and, therefore, reduce the inflation. The BER that results in stable inflation Mitchell calls the Non-Accelerating-Inflation-Buffer Employment Ratio (NAIBER)<sup>242</sup> : “(...) *instead of a buffer stock of unemployed being used to discipline the distributional struggle, the JG policy achieves this via compositional shifts in employment*”<sup>243</sup>. Every time when the inflationary pressure appears in private sector, labour is transferred to the JG/ELR sector.

Mitchell also claims that NAIBER would not necessarily be higher than NAIRU, as some of the critics of the MMT claim<sup>244</sup>. The introduction of the JG/ELR would certainly increase the aggregate demand, but this would not result in accelerating inflation, since in demand constrained economies “*firms are likely to increase capacity utilization to meet the higher sales volumes*”<sup>245</sup>. Therefore, not only NAIBER is a more socially desirable inflation control tool, but also the buffer stock of employed in the JG/ELR program would be lower than the level of unemployment under the NAIRU regime.

### 3.3 JOB GUARANTEE/EMPLOYER OF LAST RESORT PROGRAM IN PRACTICE

Direct job creation by the state is not only a theoretical concept. Several countries implemented national employment creation schemes that can be considered rudimentary versions of the JG/ELR program.

In 2004 the South African government launched the so-called Expanded Public Works Programme (EPWP) with the aim to provide “*an important avenue for labour absorption and income transfers to poor households in the short to medium-term. It is also a deliberate attempt by the public sector bodies to use expenditure on goods and services to create work opportunities for the unemployed*”<sup>246</sup>. Workers in EPWP are employed in four main sectors: infrastructure (mostly labour-intensive maintenance programmes), the Non-State Sector

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<sup>242</sup> Mitchell, W. & Muysken, J. (2008) Full Employment Abandoned: Shifting Sands and Policy Failures, Edward Elgar Publishing, p.232

<sup>243</sup> Idem., p.232

<sup>244</sup> For instance: Sawyer, M. (2003), ‘Employer of last resort: could it deliver full employment and price stability?’, Journal of Economic Issues, 39, 881–907.

<sup>245</sup> Mitchell, W. & Muysken, J. (2008) Full Employment Abandoned: Shifting Sands and Policy Failures, Edward Elgar Publishing, p.234

<sup>246</sup> The Expanded Public Works Programme (EPWP) web page <http://www.epwp.gov.za/>

(subsidised jobs in Non-Profit Organisations), Environment And Culture Sector (which includes waste management, sustainable energy, etc..) and Social Sector (child care, crime prevention, etc...)

Argentina created a job guarantee program called Plan Jefes y Jefas de Hogar Desocupados (Program for the Unemployed Male and Female Heads of Households) in April 2002. The Jefes program provides a job for every head of a poor household, for minimum 20 hours per week with a right to at least 150 pesos (75% of the minimum wage). In order to register in the program there must be children under age 18, persons with handicaps, or a pregnant woman in the household. Generally, only one person from each household could participate in the program. The jobs proposed to workers consisted mostly of community services, small construction, maintenance activities and training programs<sup>247</sup>. Despite its limited range, the Jefes program proved to be a successful tool in diminishing unemployment (2 million new jobs created)<sup>248</sup>, reintegration of the workers into the formal labour market and boosting the aggregate demand<sup>249</sup>.

The third example of a state funded job creation program comes from India. In 2005 the Indian Parliament passed the National Rural Employment Guarantee Act (NREGA) that guaranteed 100 days of employment per year to heads of poor households. Participants of the NREGA program are employed in labour - intensive rural public works projects such as: *“field of environmental conservation and restoration, involving asset-creating public works such as watershed development, land regeneration, prevention of soil erosion, and restoration of tanks”*<sup>250</sup>. The NREGA program is narrowly targeted, because only households from 200 (out of 600) districts of India are allowed to participate in the program.

All three programs presented in this section have some common components with the JG/ELR ideal. They consist of direct job creation by the government, all were implemented on the national scale and workers were employed in socially useful tasks. All three cases proved

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<sup>247</sup> All the data concerning the Plan Jefes de Hogar comes from Kaboub, F. (2007) *Employment Guarantee Programs: A Survey of Theories and Policy Experiences*, The Levy Economics Institute Working Paper No. 498

<sup>248</sup> Wray, R. L. (2012) *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems*, Palgrave Macmillan, p. 235

<sup>249</sup> Tcherneva, Pavlina and L. Randall Wray. 2005. “Is Argentina’s Jefes de Hogar an Employer of Last Resort Program?” Center for Full Employment and Price Stability, Working Paper # 43 (August). Available at: <http://www.cfeps.org/pubs/>

<sup>250</sup> Kaboub, F. (2007) *Employment Guarantee Programs: A Survey of Theories and Policy Experiences*, The Levy Economics Institute Working Paper No. 498, p. 17

themselves not only as useful tools in decreasing unemployment, but also as an institutional vehicle to achieve other socioeconomic goals (like poverty reduction and more gender equality)<sup>251</sup>.

On the other hand, the Jefes, the NREGA and EPWP are partial employment programs and therefore they do not *"benefit from all the desirable ELR features"*<sup>252</sup>. It is also difficult to draw any definitive conclusions about their effects on the price stability, since wages offered in this program do not provide an effective wage floor. In spite of these differences, in their comparison between the Argentina Jefes program and the JG/ELR ideal Tcherneva and Wray conclude that: *"Jefes shows that a massive employment program can be implemented in relatively short time, which can be properly targeted to the intended population, which can be favorably received by its beneficiaries and which can perform useful activities that serve destitute communities"*<sup>253</sup>.

## CONCLUSIONS

In the third chapter of my work I was trying to present a relatively new school of macroeconomic thought - the Modern Money Theory (MMT), also known as Modern Monetary Theory or Neo-Chartalism. Although the MMT is most often associated with the broad tent of Post Keynesianism, this is not a commonly accepted view. Indeed, some of the intellectual inspiration of the MMT school is older than the first publications of Keynes's works.

In the first section, we saw that the MMT is in reality a synthesis of different concepts and economic theories. From the works of Georg Friedrich Knapp, one of the most prominent members of the German Historical School, the MMT economists took the idea of "money as creature of the state". Contrary to classical and neoclassical economists Knapp believed that

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<sup>251</sup> Tcherneva, P. (2012) Beyond Full Employment: The Employer of Last Resort as an Institution for Change, The Levy Economics Institute Working Paper No. 732, p.15

<sup>252</sup> Tcherneva, P. and L. Randall Wray (2005) "Is Argentina's Jefes de Hogar an Employer of Last Resort Program?" Center for Full Employment and Price Stability, Working Paper # 43 (August). Available at: <http://www.cfeps.org/pubs/>, p.19-20

<sup>253</sup> Tcherneva, P. and L. Randall Wray (2005) "Is Argentina's Jefes de Hogar an Employer of Last Resort Program?" Center for Full Employment and Price Stability, Working Paper # 43 (August). Available at: <http://www.cfeps.org/pubs/>, p.20

what gives money its value is not the precious metals, but the law and the authority of the state that enforce its validity (“The State Theory of Money”).

The MMT builds also on the insights of Alfred Mitchell-Innes – the founder of the credit theory of money. In Innes’s approach, the nature of money consists of credit (in other words a recognition of a debt) and in such a case, everybody can issue the money. The position of the state as the issuer of money is however different from other potential issuers of money. The state, contrary to other market participants (households, firms and banks), can create a demand for its money, by imposing tax liability on its citizens (concepts of “Tax-Driven-Money”).

The MMT school also embraces the Post-Keynesian and Schumpeterian theory of endogenous money creation, according to which commercial banks have a capacity of creating money “*out of the thin air*”. Money supply is endogenous in the sense that incentives to create new money come from within the private sector (its demand for credit), and not from the central bank. Finally, the MMT economists integrated Abba Lerner’s concept of functional finance. The theory of functional finance rejects the idea of the “sound finance” and evaluates the government policies from the point of view of their effectiveness in achieving the macroeconomic goals.

In this chapter I tried to show that it is possible to clearly distinguish the descriptive component of the MMT, from policy recommendations advocated by the MMT economists (i.e. the prescriptive part of the theory).

The descriptive part of the MMT consists of a detailed explanation of functioning of contemporary monetary economies. The starting point of this analysis is the alternative understanding of the nature of money. In the MMT approach, the principal characteristic of what we commonly refer to as “money” is its credit (debt) character. Money is simply a recognition of a debt – a particular type of IOU’s. In such a case, everybody can “create” money, but as Hyman Minsky noticed, the problem is in getting it accepted by other market participants.

From this point of view, the position of governments is however diametrically different. Governments can create a demand for money issued by them by imposing tax liabilities on its

citizens. Moreover, governments, can also name units of accounts (American Dollar, Brazilian Real, British Pound, etc...) and issue “money things” denominated in these units. Those government currencies are the only available possibility for the citizens to discharge themselves from the aforementioned tax liabilities. This assures that there will always be a demand for money created by the state.

The money created by other agents has a smaller degree of acceptability than money created by governments. Since majority of private liabilities are not only denominated in government’s money, but are also convertible into government’s currency we can, after Randall Wray, illustrate the monetary system as a “pyramid of liabilities”. Indeed, there is a hierarchy among different kinds of money (those lower in the hierarchy are convertible to those higher in the hierarchy), and their position in this hierarchy depends on the status of the issuer (bank, private firm, household, etc...). Once again the position of government is special, since every other kind of money is convertible into money issued by government (but not the other way around).

From the fact that governments have a monopoly for issuing its currency we can conclude that government money has to be injected into the private sector by governmental spending (government spends money into existence). In practice governments spend by crediting bank reserves of the private sector agents, and tax them by debiting those reserves. Commercial banks play an intermediary role between government and the private sector.

Using Wynne Godley’s sectoral balances analytical framework and simple macro accounting principles, the MMT economists came to surprising conclusions: net financial wealth equals public debt. In a two-sector model (private and public sector) it is impossible for both of them to run surpluses at the same time : deficit spending creates private financial wealth. This accounting relationship would not be fundamentally changed by including foreign balance (difference between import and export).

This MMT insights into the mechanism of the modern monetary systems runs against some of the conventional wisdoms of the mainstream policies: the concept of a balanced budget approach and the ideology of “sound finance”. In the MMT view there is nothing wrong with deficit spending – in fact it is necessary in order for the private sector to grow.

This brings us to the most important conclusion of the MMT – monetary sovereign governments (i.e. governments that issue its own currency) with floating exchange rates, do not face the affordability constraints. Since those governments are the monopolist issuers of their currency they can afford to buy any goods and services that are for sale in this currency. In their spending decisions, the governments face other types of constraints: pressure on exchange rates, limits of resources, political (limits on the public deficit and public debt imposed by the law) and inflationary pressures.

The policy recommendations of the MMT economists (the prescriptive part of the theory) are inspired by the Abba Lerner theory of functional finance and Hyman Minsky's concept of "Employer of Last Resort". In the MMT approach, since the governments can afford to buy everything that is for sale in the currency issued by those governments, they can also afford to buy idle labour. Therefore, MMT advocates the universal and public funded job creation program, called Employer of Last Resort or Job Guarantee.

Monetary sovereign governments should use their fiscal and monetary prerogatives to achieve the most important macroeconomic goals: full employment and price stability. The JG/ELR program is a perfect tool to achieve both of them. By offering public sector jobs to anyone willing and able to work, the government can effectively eradicate unemployment and maintain the employment in the long run. By sustaining the buffer employment ratio, the government can provide price stability without social costs generated by the NAIRU policies (i.e unemployment buffer stock). Additionally, it is an institutional vehicle to achieve other socioeconomic goals, like poverty reduction, reinforcement of labour laws and minimum wage legislation.



## CONCLUSIONS

The question under discussion in this study was the possibility of achieving and maintaining the employment in capitalist economy. Persistent unemployment lies at the heart of economic malaise in vast majority of modern societies. It is a very complex socio-economic phenomenon that could be analysed on different levels. In my work I choose to investigate both political and economic aspects of unemployment. Accordingly, in succeeding chapters I dealt with the economic theory of labour markets, some political issues associated with unemployment and finally with the future perspective of full employment.

What I have tried to show in the first chapter is that in economic sciences we can clearly distinguish two theoretical explanations of the phenomenon of unemployment. The classical theory of labour market builds on the insights of Adam Smith, Jean-Baptiste Say and John Bates Clark and was synthesised in works of Arthur Pigou. According to this view, self-equilibrating market forces will always guarantee that demand for labour is always balanced by the supply of labour. Therefore, markets will always clear – there will be no idle resources or idle labour. Existing unemployment is always caused by factors that disturb functioning of those market forces, like minimum wage legislation or trade unions collective agreement. Those external-to-market forces set wages on the level that prevents market from clearing.

In the 1970s this explanation of unemployment was taken up by the modern mainstream economic theory. Just like their classical predecessors, neoclassical economists believe that the main cause of unemployment are the wage rigidities. Their economic policy prescriptions are, therefore, targeted at “freeing the markets” and removing all legislation that according to them impedes the functioning of the market forces.

This (neo)classical view of labour market can be clearly distinguished from the (post)Keynesian theory of unemployment. For Keynes and his followers, capitalism is essentially a monetary economy. It means that money functions not only as an intermediary unit of account that facilitates the exchange of goods and services, but it has utility on its own. In periods of pessimistic expectations about possibility of profitable investments, money provides protection against uncertainty, in other words money is a store of value. Money and other liquid assets have zero elasticity of production, which means that labour from

commodity producing sectors cannot be simply redirected towards production of money (or other liquid assets). This means that when the demand for liquidity in economy rises, there will be not enough investments in private sector to assure full employment. Therefore, according to Keynes and his followers even with perfectly flexible wages, there would still be a possibility for involuntary unemployment.

In the second chapter I investigated some political aspects of full employment. Firstly, I have presented Keynes's economic policy recommendations that were adopted by most of the developed nations after World War II. Those included moderate income and wealth redistribution, monetary policy (low interest rate and policy of cheap credit) and finally a fiscal policy. That third component included lowering taxes in recession and some kind of "socialisation of investment" by which Keynes meant countercyclical public investment. Increased public spending would offset the consequences of private sector liquidity preferences and resulting in involuntary unemployment. From the historical examples of usage of Keynesian fiscal policies recommendations in Japan, the USA and in various countries after the 2008 global Financial Crisis, we can conclude that they proved to be successful in stimulating economy and bringing back a near full employment level.

Secondly, I tried to respond to the question why, in spite of their apparent success, Keynesian economic policies have been abandoned by most developed countries in the 1970s. While this is a very complex issue, it seems that the concept of political business cycle, developed by the Polish economist Michał Kalecki offers at least a partial response to this question. According to Kalecki (and Joan Robinson who later expanded Kalecki's arguments), Keynes was absolutely right both in his explanation of the sources of involuntary unemployment and in his economic policy recommendations. For Kalecki, elimination of unemployment is entirely possible, provided that government follows Keynes's prescriptions. He claimed that real limits to full employment are not economical, but rather political: a government committed to full employment will necessarily face political opposition of the business community. Kalecki enumerated different reasons for this opposition, from which one seems to be particularly important. In capitalism, unemployment functions as a disciplinary device which allows the "captains of industry" to keep workers wage demands in check and therefore preserving the value of money. It also makes it possible for big business to carry out an "investment strike" - a refusal to invest in order to gain some favorable legislation from the government. In other words, full employment would completely change the balance of power between both

capitalists and workers, and between capitalists and the government. Those changes would be disadvantageous for the capitalist position in the society, so they will fervently oppose the policies directed at maintaining full employment.

In the third chapter I discussed the development of a relatively new school of economic thought that could be considered as one of subgroups of the broad tent of Post Keynesianism – the Modern Money Theory. I tried to show that MMT was a very creative synthesis of different intellectual traditions, rather than something completely new. The main theoretical building block of the MMT includes Alfred Mitchell-Innes's Credit Theory of Money, Georg Friedrich Knapp's State Theory of Money, Abba Lerner's Functional Finance, the Post Keynesian Theory of Endogenous Money, Hyman Minsky's ELR/JG program and finally Wynne Godley's sectoral financial balances approach.

I argued that we can clearly distinguish the descriptive and normative components of the MMT. The descriptive part of the theory deals with the nature of money and explains how fiat money is created and destroyed in modern economies. In the MMT framework, there is a crucial distinction between issuers and users of the currency. The issuers of the currency, normally a government, can create money of account and then impose tax liabilities on its citizens. Then, the government issues a currency that is denominated in that money of account. This currency will be always accepted by its citizens since they need it in order to settle their tax liabilities with the government (concept of tax-driven money). We can conclude that the function of taxes is not to raise the revenues for public spending but to create a demand for the government money.

Issuers of the currency create money by “spending it into existence”, that is by crediting the bank accounts of the private sector (and destroying the money by debiting those accounts). Monetarily sovereign governments do not need to raise money in taxes or to borrow it from the private sector. Therefore, contrary to users of the currency, issuers of the currency with floating exchange rates are always solvent, and can afford to buy anything for sale in their domestic unit of account. Monetarily sovereign governments do not face the affordability constraints, even though they face inflationary, political and exchange rate constraints.

The most important economic policy recommendation of the MMT (its normative component) is Hyman Minsky's concept of Employer of Last Resort or Job Guarantee program.

A monetary sovereign government with floating exchange rates has enough fiscal and monetary policy space to serve the public purpose, that is to realise the goals defined by society in a political process. Two of such goals are of particular importance for MMT economists: full employment and price stability. Since monetary sovereign governments can afford everything for sale in their own currency, therefore they can also afford to buy labour power of people who cannot find employment in the private sector. In other words, it can eliminate unemployment and attain full employment. The ELR/JG program would also function as an inflation control mechanism : employment in the ELR/JG program would increase during recession and decrease during a boom when wage demands increase – the government could always use tighter fiscal and monetary tools to increase the pool of employed in the ELR/JG program and therefore reduce the inflation. The national employment creation schemes from Argentina, India and South Africa discussed in the end of the chapter proved to be efficient in decreasing unemployment, and in achieving other public goals, even if they do not share all the features of the ELR/JG ideal advocated by the MMT economists.

I conclude that the ELR/JG program (direct job creation by the government) advocated by the MMT economists provides a more efficient way to achieve full employment than the traditional Keynesian fiscal stimulus. It should be noticed, however, that MMT does not give direct solutions to the problem raised by Kalecki and Robinson, namely that opposition to the full employment is rather political, than economical. But it does provide theoretical framework in which full employment and price stability are not mutually exclusive goals, and by that, it debunks the most important argument raised by those who oppose the full employment. And that is the main contribution of the MMT – it undermines the intellectual justification of unemployment. But just as Kalecki pointed out, whether the full employment is maintained or not, it will be determined within the political sphere, and not in the academic discussion between MMT proponents and mainstream economists.

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