

Welfare–Debt Trade-off: It's the Denominator, Stupid!

or Why You Really Need Welfare, Even if You Have a Credit Card

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Money and debt are important social institutions concurring and influencing the distribution of welfare in society. Different monetary arrangements or debt habits may have important redistributive consequences.

Over the last few decades, we have seen a significant rise in levels of household indebtedness. According to Keen (2008, 2012), this phenomenon is a blind spot of modern economics: “Neoclassical economists (who dominate both academic economics and policy advice to governments) have a blind-spot regarding the role of private debt in macroeconomics, yet despite the economy crashing once before because of private debt during the Great Depression, they continue to argue that it is now irrelevant now during this latest crash.”

The economics literature on the subject tends to give endogenous explanations of debt levels observing the behavior or cultural habits of families and individuals. Brown (2008) tends to stress the importance of family habits, showing how increasing levels of consumption over the years leads to a corresponding increase in credit utilization. Gul and Pesendorfer (2001, 2004) and Nakajima (2011) have developed models where agents articulate their preferences about credit consumption between the factors of *temptation* and *self-control*. Another common endogenous explanation of debt level is linked to lifecycles; according to the classic model of Modigliani (2010), younger households tend to get in debt in order to smooth consumption over time. As well, according to Schooley and Worden (Schooley & Worden, 2010), younger households are more likely to borrow for consumption and smooth their consumption over time.

Traditionally on the sociological side of the academic spectrum, little attention is given to the rise of household debt, according to Ritzer (2011): “It is both fascinating and troubling that American sociologists have given little attention to the phenomena of credit and consumer culture, which are so quintessentially American, and sociological in nature.”

After being ignored for a long time, sociologists’ interest in the thematics of debt and money has been renewed by the great economic crisis of 2008. In approaching the phenomenon of debt, sociologists are particularly interested in understanding how debt is interconnected with welfare institutions and financial market regulation. In particular, there is intense interest in explaining the reasons behind the rise of household indebtedness of the last decades.

One of the few empiric and comparative studies on this question was performed by Eddie Gerba and Waltraud Schelkle (2013). They attempted to understand if the lack of welfare encouraged the accumulation of debt (substitutive relation), or if it had the opposite effect, namely if debt rose when welfare safety nets in some way promoted households access to credit (complementary effect). According to their conclusions, the “finance–welfare state nexus fits the complementarity hypothesis better,” so it seems that welfare makes households confident enough to borrow money.

Alternatively, the substitutive relation hypothesis is sustained by mostly Anglo-Saxon scholars like Trumbull (2012), Montgomerie (2007), Prasad (2012), and Soederberg (2012). They point out that the

increase in household debt is due to welfare retrenchment or privatization. The role of Anglo-Saxon asset-based welfare, in particular, is stressed (Hay, 2011).

Another sociological interpretation of the phenomenon underlines the important role of financial innovations, according to scholars like Fligstein & Goldstein (2010; 2011), Poon (2007; 2009), and MacKenzie (2011). They found these to be the reason behind the increased leverage of families in market liberalization and deregulation of the financial and banking sector, along with technological innovations like securitization and credit scoring.

Many of these studies fail to evaluate and measure the problem, as there is a surprising lack of empiric studies of the phenomenon, both micro and macro.

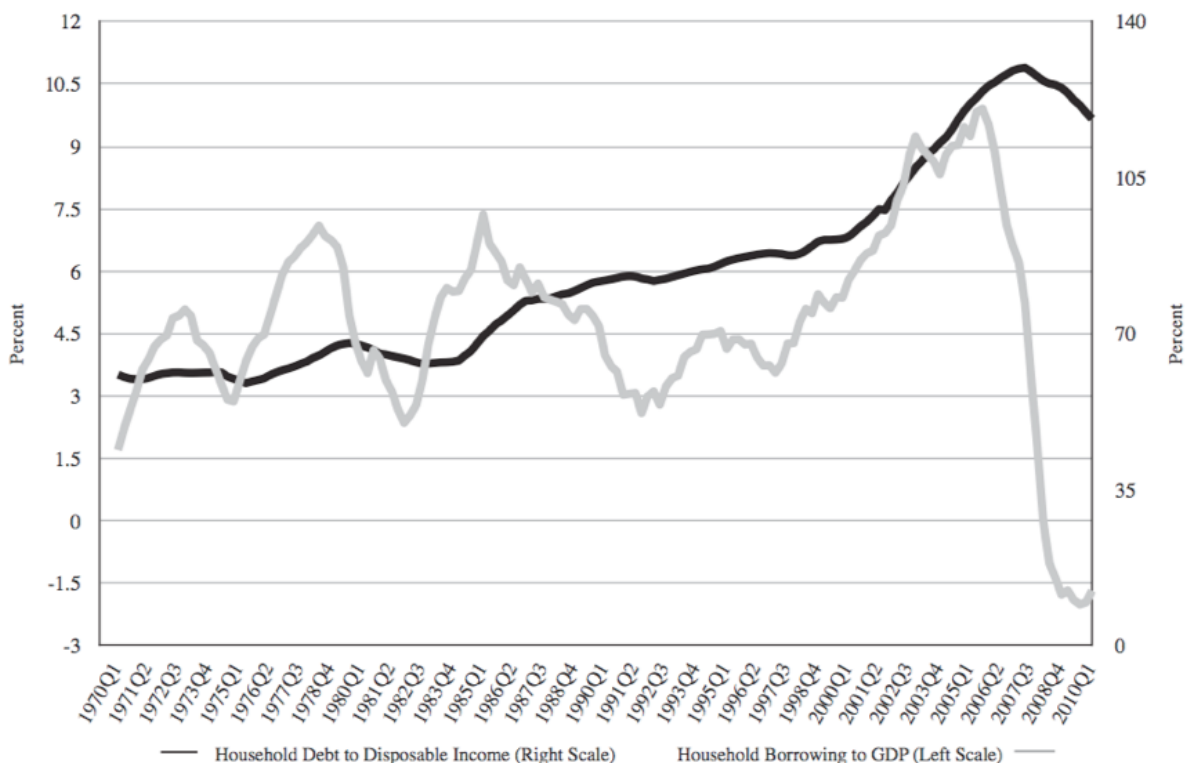
The present paper is not going to change the trend, as this is not an empiric paper either. The aim of this study is to critique the conventional theoretic interpretation of the rise of indebtedness and to try to delineate a new hypothesis on how the relationship between welfare and debt is configured. This is the first step toward a theoretically driven empiric study of the phenomenon of debt.

As I mentioned above, scholars have delineated two main correlations: deregulation of the financial sector and welfare safety nets may boost private debt; and the same could be said for welfare reattachment or welfare privatization. While both propositions sound reasonable, they must be tested.

I propose here a third hypothesis, as an effort to integrate those two visions. I do not think we can reach a “one-size-fits-all” type of explanation; context matters, and as many other sociologists have noticed, welfare is an important part of that. What I believe is important to underline, is that different types of welfare may have different effects on indebtedness. I will use the “welfare regime theory” to explain why, in certain context, debt may have a substitute effect and in others contexts a complementary effect. The macro transformation of the production paradigm plays a crucial role too, and the rise of jobs in the service sector plays a crucial role on income dynamics as well.

Another element is severely underrated when studying debt, and that is debt’s nature. If we look at the relationship between borrowed money and debt (fig. 1), we see that is not a straightforward relationship. In the 1950s and 1960s, the quantity of borrowed money (over GDP) was high, but the level of indebtedness (measured as debt to income) was quite low. However, starting with the 1980s, the picture started to change. Even if families were borrowing the same, or less, the quantity of debt was still on the rise.

Figure 1 – Household debt to income (black, right scale) / Household borrowing to GDP (grey, left scale)



Source: Figure 1: dos Santos, P. L. (2012). A cause for policy concern: the expansion of household credit in middle-income economies. *International Review of Applied Economics*, ahead-of-print, 1-23.

Previous studies failed to understand how debt is constructed as a statistical figure; debt is a relational concept. The rise of debt can be the result of a rise in household borrowing, but it is not completely explained by it. Debt is usually measured as debt to income. To explain the strange rise of household indebtedness since the 1980s, it is perhaps best to check the denominator – namely income and the wider social structuring of economic instability – rather than the numerator (debt).

The hypothesis of this paper is that the levels of debt are better explained by income dynamics and other contextual and exogenous factors, namely the rise of a service economy and the relative “cost disease” in the first place, but monetary policies and inflation control are also crucial.

My aim for future empirical research is to show at the micro level how a drop in family income corresponds to a rise in family indebtedness, even if families are not necessarily borrowing more money than in previous decades. My argument is that the rise of unemployment after the industrial golden age and the growing share of low-paying jobs in the service sector also played a role in indebtedness.

At the macro level, I wish to show how, starting with the 1980s, families had a harder time repaying debts because of the rigid inflation control that was established with the Volcker Revolution. The high inflation control made debts difficult for households to repay. I would argue that during the 1950s and 1960s, monetary policies were used to stimulate the economy and with full employment in mind, and had the side effect of “inflating the debt away.” The redistributive consequences of inflation have an important role in shaping inequalities (Goldthorpe, 1978; Hirsch & Goldthorpe, 1978), yet are severely underrated.

This paper is structured as follows. In the first part, I will try to explain the origin and the meaning of the accumulation paradigm shift using the cost-disease theory of William Baumol. In the second part of the paper, with the aid of Esping-Andersen classification, I will explain how different societies deal with the “cost disease.”

In third section, I will focus my attention on Anglo-Saxon welfares, and I will try to understand how this paradigm shift influences the lives of workers and consumers, and what influence that may have on borrowings. In the fourth section, I will try to determine what it means for banks and the financial sector, so I will focus my attention on the sociological aspect of monetary policy.

In the fifth part, I will draw a parallel between micro and macro, and show how debt is not just a problem for households but also for countries.

1) Cost Disease: What Is It?

In 1967, William Baumol published the book, *Performing Arts: The Economic Dilemma* (Baumol & Bowen, 1993), in which he studied in-depth all the economic problems relating to theatres, opera, orchestral music, and dance. In this book, he proposed an interesting and economical explanation for why those activities are generally so expensive and, consequently, why they often need a significant amount of public funding and other subsidies in order to run. Baumol noted that for a string quintet to perform Beethoven, we still need the same amount of work and number of personnel today that we needed in 1826 *alla prima*. Obviously, this specificity is intrinsic to the nature of the task, and there is no other way to boost productivity. Nevertheless, the rest of society has changed greatly since 1826, and thanks to industrialisation and technological innovation, overall productivity has skyrocketed.

According to Baumol, the level of wages both in the performing arts and the industrial sectors tend to rise. But increases in productivity only occur in the industrial sector, while the productivity of the performing arts remains unavoidably stagnant. This explains why the average costs of the art sector tend to rise. Baumol gives us an example: the watchmakers of Geneva increased production from twelve clocks per hour in 1670 to 1,200 clocks per hour in 1975, but playing *Dido and Aeneas* (1688) by Henry Purcell (1659–1695) demands the same amount of work today as it did before. So, given that the wages in both sectors have risen, playing *Dido and Aeneas* today will be very expensive.

To sum up, we have a constant increase in wages both in the industrial sector and the artistic sector. But only in the industrial sector do we have an increase in productivity, while in the artistic sector, productivity remains stagnant. This creates what Baumol called unbalanced growth and the cost disease of the performing arts.

In the following years, Baumol applied the idea of cost disease to explain a number of phenomena, such as the rise of the cost of many sectors other than the performing arts. In a paper in 1967 (Baumol, 1967), he tried to describe why large cities tend to run into deficit. He argued that given the vast amount of services that a city should provide, cost disease will be particularly tough. According to Baumol, cost disease is congenital to the technological structure of an economy. Baumol divided the economy into two main sectors: the technologically progressive and the technologically stagnant. The former is the industrial sector, where, thanks to technological innovations, a constant rise in productivity can be expected. The latter is the service sector, which is afflicted by cost disease. The distinction between the two sectors is grounded in the role of labour. In the technologically progressive sector, with the same amount of work (input), we have a larger output of goods due to improvements in the technology of production. In the service sector, in contrast, the input of labour is equal to the output. As Baumol put it: “The basic source

of differentiation resides in the role played by labor in the activity. In some cases, labor is primarily an instrument, an incidental requisite for the attainment of the final product, while in the others fields of endeavor, for all practical purposes, the labor is itself the end product.”

The model used by Baumol is quite trivial, and his division of society into stagnant and productive sectors is somewhat arbitrary but nevertheless quite powerful. It is based on three assumptions:

(1)

$$Y_{1t} = aL_{1t}$$

(2)

$$Y_{2t} = bL_{2t} e^{rt}$$

where Y is the output at time t , L is the labour employed, which grows at a constant rate, and r is in the case of the (2) technologically progressive sector. In plain English, that means that the output of the productive sector tends to rise, even if the quantity of labour, L , is constant. That is because the progressive sector can raise the output per man-hour due to technological innovation, e^{rt} .

(3)

$$W_t = W e^{rt}$$

If only the productivity of the progressive sector tends to rise, the wages of both tend to rise at the rate of the progressive sector, which has clear influences on the final cost:

$$C_1 = W_t L_{1t} / Y_{1t} = W e^{rt} L_{1t} / a L_{1t} = W e^{rt} / a$$

$$C_2 = W_t L_{2t} / Y_{2t} = W e^{rt} L_{2t} / b L_{2t} e^{rt} = W / b$$

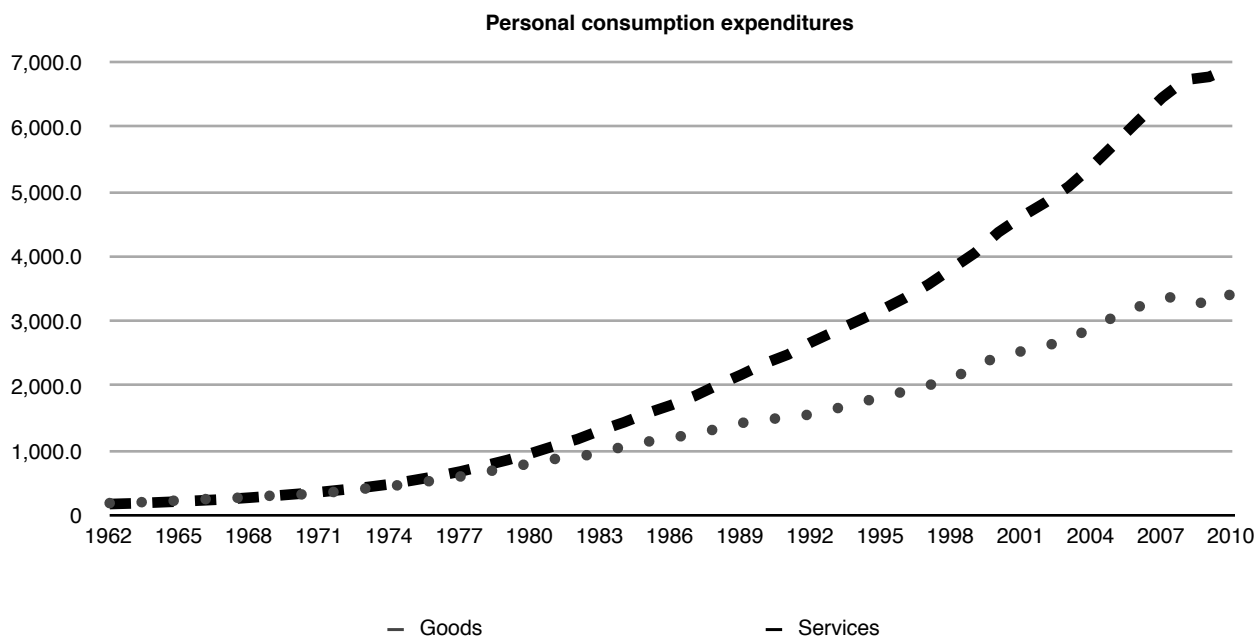
Here, Baumol explains how the cost, C , of goods or services is obtained, through the multiplication of wages, W , and labour, L , divided by output, Y . We can see that in the progressive sector, C_2 , the cost tends to remain stable over time, while in the service sector, C_1 , the cost tends to rise.

Baumol's model explains why, given the sticky productivity of the service sector, an increase in output will be possible only with an increase of work allocated to the stagnant sector. For this reason, over time, “more and more of the total labor force must be transferred to the non-progressive sector and the amount of labor in the other sectors will tend to approach zero.” That is why the service sector is labour intensive and the progressive sector is capital intensive: the latter uses technological innovation to save work.

In 1985, Baumol updated the paper to include a third category of labour (Baumol, Blackman, & Wolff, 1985), the asymptotically stagnant, which encompasses all the new types of work in the service sector which use strong technological innovation such as informatics, broadcasting, data processing, and other high-tech industries. In those activities, the progressive component is strong, but at the same time they demand a constant quantity of human input, and in the long run the cost of the human workforce will become more and more important. Baumol took an example from the technological sector, where the cost of hardware falls significantly over time while the cost of software and all related human services has an inexorable tendency to rise. In 1993, he wrote another paper using the same idea and applied it to the cost of education and healthcare (Baumol, 1993).

As we can see in Figure 2, the expenditure for services (dashed) increases considerably more than the cost of goods (dotted), which has been a general trend since the Second World War.

Figure 2 – Personal consumption expenditures for Goods (grey) and Services (black) (1962–2010) [Billions of dollars]



Source: Economic Report of the President, 2011

Herein lies the problem. If the service sector, which involves healthcare, education, insurance, administration, support of the indigent, etc., is chronically afflicted by cost disease, how can the welfare of a nation be sustainable if the burden of the cost of those services continues to rise? As Baumol put it emphatically, “a[n] economic specter haunts the democratic governments of the world’s most prosperous economies. The rising cost of healthcare and education cast a shadow over virtually every election, while increasing costs of other services play a part in the growth of the homeless population and the deteriorating sanitation of city streets.” So, are we ineluctably victims of cost disease and the unbalanced growth between sectors?

Baumol’s theory is quite an exception in social science; not only did he explain with simplicity and elegance the phenomenon, which, as we saw, was first formulated in the 1960s in relation to the field of the performing arts, but he also predicted with a high degree of accuracy the constant rise in cost of services of the following decades up until now. He also proposed how to resolve – or at least, attenuate – the problem (Baumol, 2012).

So, as a society, we have to deal with cost disease, and we have to choose how to deal with it. There is no perfect solution, and no way to fix it definitely. But we have two main options that both have a long and glorious history: we let the market set the prices for all the welfare services we need, or we finance all those services through government. In other words, we let consumers face cost disease alone, and let competition try to limit the cost of the unbalanced growth, or we use general taxation in order to provide those welfare services and try to control their price. Both solutions can be controversial because they have a political connotation: as the level of public spending and taxation will rise, the centrality of the government will be reinforced. Otherwise, the state will be weaker if the other policy is adopted.

If the first solution is a liberal, *laissez-faire* solution, letting the market be free, the second solution is all about redistribution. Reality is never so dichotomic, and in most cases the institutional framework is a mixed bag of private, free-market, and public welfare, but the proportions of those elements in the recipe can change considerably. Sociologists have studied how societies adapt to and confront cost disease.

2) How to Deal with Cost Disease

In the vast sociological literature on welfare, Gosta Esping-Andersen has provided an original theoretical contribution to the definition of welfare (Esping-Andersen, 1990; Esping-Andersen, 1999). He conducted theory-driven empirical research and defined welfare as the capacity for “decommodification.” So, with Baumol we have seen that the cost of welfare tends to rise given the nature of the technological structure of society. We have also seen that we have no way of dealing with the problem: socialisation of cost disease and the free market. With the contribution of Esping-Andersen, we will see how different countries deal with the problem of mixing elements of market and public policy. But to understand Esping-Andersen, we need to know what “decommodification” means and where this word comes from.

The idea of decommodification, and probably also the word, was invented by the Hungarian anthropologist Karl Polanyi. In his *magnum opus*, *The Great Transformation* (Polanyi, 1944), he explained how liberal ideals and ideology came to power thanks to a complex combination of elements, both economic and political. Traditionally, the market, like any other social activity, has been regulated by specific social norms in order to maintain cohesion in society. Often this cohesion was retained by brutal power and obscurantism, but with the rise of the *bourgeoisie*, traditional power and ideology have been challenged. Liberalism was the ideological and intellectual tool that helped the *bourgeoisie* to free themselves from the aristocracy and the clerics.

Another important factor was the lack of central power in Europe, which assisted in the development of a self-regulated market economy (Pellicani, 1994).

According to Polanyi, market ideology tends to use work, money, and land as commodities. Until recent times, work in labour/economic models was conceptualised like any other commodity, such as a box of zucchini, for instance, which can be stored and conserved, and whose price is simply the outcome of the interaction between supply and demand. But as Polanyi explained, work, money, and environment, because of their very nature, cannot be managed as commodities. His whole book is meant to prove that to try to manage those things as commodities is generally detrimental to society as a whole, including the economic sphere (Polanyi, 2011).

Polanyi’s *Great Transformation* used the history of the five-century-long struggle between society and markets. Society needs markets, but using markets as the only principle for societal coordination is dangerous for the survival of non-market ties such as family and other forms of solidarity. The contrary is also true; excessive power of society is detrimental to the markets, and that has been the case for the past few centuries, where market activity has been strictly regulated by all sorts of societal norms in the hands of corporations and guilds. In Polanyi’s terms, this contrast between market and society is a “double movement”: the expansion of market power is inevitably accompanied by the development of safety nets and social protections.

As we have seen, there are, according to Baumol, two different strategies to deal with cost decrease: the first is to let the market be free (commodification), and the second is to socialise the price of cost disease (decommodification). Rereading the work of Esping-Andersen in the light of Baumol’s theory, we may ask

how, in the western world, societies deal with cost disease, and which strategies they enact to protect society from the market. We have three models:

(1) In the Scandinavian welfare system, the price of cost disease is redistributed among the population by general taxation. Scandinavia has the youngest welfare system, with its characteristics having been defined only at the end of the Second World War. According to Esping-Andersen, “the social democratic welfare state is particularly committed to comprehensive risk coverage, generous benefit levels, and egalitarianism.” As we said, the task of universalist welfare is to pool risk in order to provide generous income replacement and a series of services to requalify people and maintain full employment.

(2) In continental welfare, cost disease is generally absorbed by families (in Mediterranean welfare) or redistributed within the same classes (corporatist welfare). This welfare system is based on the socially conservative ideas of Bismark in Germany. His idea was to redistribute wealth not between the classes, as with universalist welfare, but within the classes.

(3) In liberal welfare systems, cost disease is not socialised; the cost of services is decided by the markets, and competition is the only obstacle to cost disease. That explains the massive rise of tuition fees in universities and the growing cost of healthcare. Liberal welfare is residual, meaning it covers only extreme situations of poverty, and all those policies are strictly means-tested. One of the outcomes of this system is the tendency to blame those who cannot survive in the market, and welfare dependence carries a stigma.

Universal welfare scores higher on the decommodification scale, as it protects and redistributes more; conservative welfare scores less, not because it is less generous than Scandinavian welfare but because it is more selective (families and older people are protected more); and liberal welfare decommodifies a little or not at all, except for those left behind by the market.

The originality of Esping-Andersen's work hinges on the fact that the welfare state is seen as a redistribution mechanism, and therefore as a stratification tool. Since Marx, sociology understands class in a relational framework where class is the product of working relations: “In the social production of their existence, men inevitably enter into definite relations, which are independent of their will; namely, relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation from which arises a legal and political superstructure and to which correspond definite forms of social consciousness” (Marx ****). But if we define class as a product of “relations of production,” we should also know that class is just part of the stratification process and stratification includes many other dimensions. Work is not the only source of wealth, and consequently is not the only source of stratification. Wealth is also not the only basis for stratification. We have other factors that define the concept, such as gender, nationality, language, social inclusion, education, etc. Nevertheless, we are persuaded that class is what explains most differences in modern societies.

We know that the labour market generates classes. According to Goldthorpe (Goldthorpe, 2004), class is a particularly useful indicator of three key elements: economic security, economic stability, and economic prospects. Thanks to class, we can estimate the wealth of a person, the stability of this wealth, and the person's prospects for the future. The work of Esping-Andersen adds an additional layer to this and explains how welfare can counterbalance the effect of the labour market or reiterate its effect. In the next two sections, we will see how cost disease has impacted workers, families, banks, and policies in the USA, and how a lack of coherent redistributive policies has destabilised the economy.

3) Cost Disease: What Does it Mean for Workers and Consumers?

3.1 For Workers

As we have seen, Baumol's theory – in its original version – divides society into two categories, the productive sector and the service sector. We have also mentioned how this dichotomy is an ideal type, more useful for theoretical purposes than for his empirical accuracy, as reality is more nuanced.

The service sector is composed of those activities that need the presence of the worker while delivering the product, services that “usually require direct, face-to-face interaction between those who provide the service and those who consume it.” So we are not talking only about healthcare or education, but also a wide range of services including welfare programmes for the poor, repair services, the performing arts, legal services, insurance, the postal service, police protection, restaurant services, sanitation, and countless others.

Technology improvements raise the output of the industrial sector without the need to hire more workforce; even with the same amount of man labour, the output will rise. In the service sector, as the service is provided only face to face in order to accommodate a growing demand, the only way to improve productivity is to hire more people. Technological improvements are not always possible and have a much more limited impact. This explains why the cost of the service sector rises significantly and can get out of control.

As we have seen with Esping-Andersen, different societies deal with cost disease in different ways, and this redistribution of cost disease leads to a re-stratification of society.

We will now focus on the United States. Here, welfare has been shaped more than elsewhere on the notions of self-help and less eligibility. Esping-Andersen calls the Anglo-Saxon welfare a “residual welfare,” as it protects only the weakest of society, and this help is often accorded after a check of the real needs (means testing). Recent studies have shown how the American welfare system does have a hidden side (Howard, 1999), as it provides generous tax deductions and others forms of support targeted for the middle and upper classes. But following Esping-Andersen's approach, we will focus only on the visible part of it.

As we show in Table 1, in the period between 1983 and 1995, the United States experienced a gap in productivity in the service sector that lagged far behind the manufacturing sector, and that problem is shared – in the same time frame and with different degrees of intensity – by other western economies.

Table 1 – The growing productivity gap. Percentage change in the ratio of service-to-manufacturing productivity for select countries between 1983 and 1995.

	Ratio of restaurants to manufacturing	Ratio of personal services to manufacturing	Ratio of business services to manufacturing	Ratio of social services to manufacturing
USA	-7	-47	-55	-62
Denmark	-35	-30	-11	-2
Sweden	-82	-60	-71	-54
France	-56	-41	-38	+4
Netherlands	-40	-19	-38	-28

Productivity is measured as GDP (gross domestic product, in constant prices) per person employed. Source: OECD Data File on Services Statistics on Value Added and Employment. (GEA, p 112).

To keep services up with demand, a large share of new jobs were created in the service sector: as services have to be provided mainly face to face, and there is little or no possibility of technological help, the only way to increase productivity is to hire more people. In Table 2, we see the trends of employment over the last twenty years. The table shows that the industrial and manufacturing sector is constantly losing jobs, while an important number of new jobs are created in the service sector, which is growing. A total of 4,874,800 jobs were created in the service sector, against the 6,864,200 jobs lost in the goods-producing sector, and especially in manufacturing.

Table 2 – Employment by sector, Thousands of jobs

Industrial sector				Change
	2000	2010	2020	2000–10
Goods-producing, excluding agriculture	24,569.7	17,705.5	19,496.8	-6,864.2
Mining	520.4	655.9	680.7	135.5
Construction	6,786.4	5,525.6	7,365.1	-1,260.8
Manufacturing	17,262.9	11,524.0	11,450.9	-5,738.9
Services-providing	107,855.3	112,730.1	130,680.1	4,874.8
Utilities	601.3	551.8	516.1	-49.5
Wholesale trade	5,933.5	5,456.1	6,200.2	-477.4
Retail trade	15,279.8	14,413.7	16,182.2	-866.1
Transportation and warehousing	4,410.3	4,183.3	5,036.2	-227.0
Information	3,630.6	2,710.9	2,851.2	-919.7
Financial activities	7,687.5	7,630.2	8,410.6	-57.3
Professional and business services	16,666.1	16,688.0	20,497.0	21.9
Educational services	2,390.6	3,149.6	3,968.8	759.0
Healthcare and social assistance	12,718.3	16,414.5	22,053.9	3,696.2
Leisure and hospitality	11,861.6	13,019.6	14,362.3	1,158.0
Other services	5,885.7	6,031.3	6,850.7	145.6
Federal government	2,865.0	2,968.0	2,596.0	103.0
State and local government	17,925.0	19,513.1	21,154.8	1,588.1

Source: Employment Projections Program, U.S. Department of Labor, U.S. Bureau of Labor Statistics (Table 2.1)

In section one of this paper, we have seen how the wage increase of the service sector causes cost disease. This should not mislead the reader into thinking that the wages of workers are high; in fact, it is quite the contrary. Service sector wages rise faster than productivity at the aggregate level because to improve productivity, it is also necessary to increase labour. But on the whole, in order to force down the costs of the services, the wages of service workers are kept as low as possible. As we see in Table 3, the share of household income of the lower quintiles has been shrinking since the 1970s. As service jobs are for the most part lower-paying and lower-class jobs, this may explain why the lower quintiles show an important decline of their shares of income over time; it is a sort of wage compression caused by the pressure of cost disease. The quantity of societal spending in the service sector rises considerably and the amount of

labour needed to provide those services rises too, but the wages tend to be more compressed. At the same time, it is interesting to observe a steady increase in the revenue share of the highest quintiles, which is the only measure to show an improvement since the 1970s.

Table 3 – Shares of household income of quintiles in the USA from 1970 to 2011 (%)

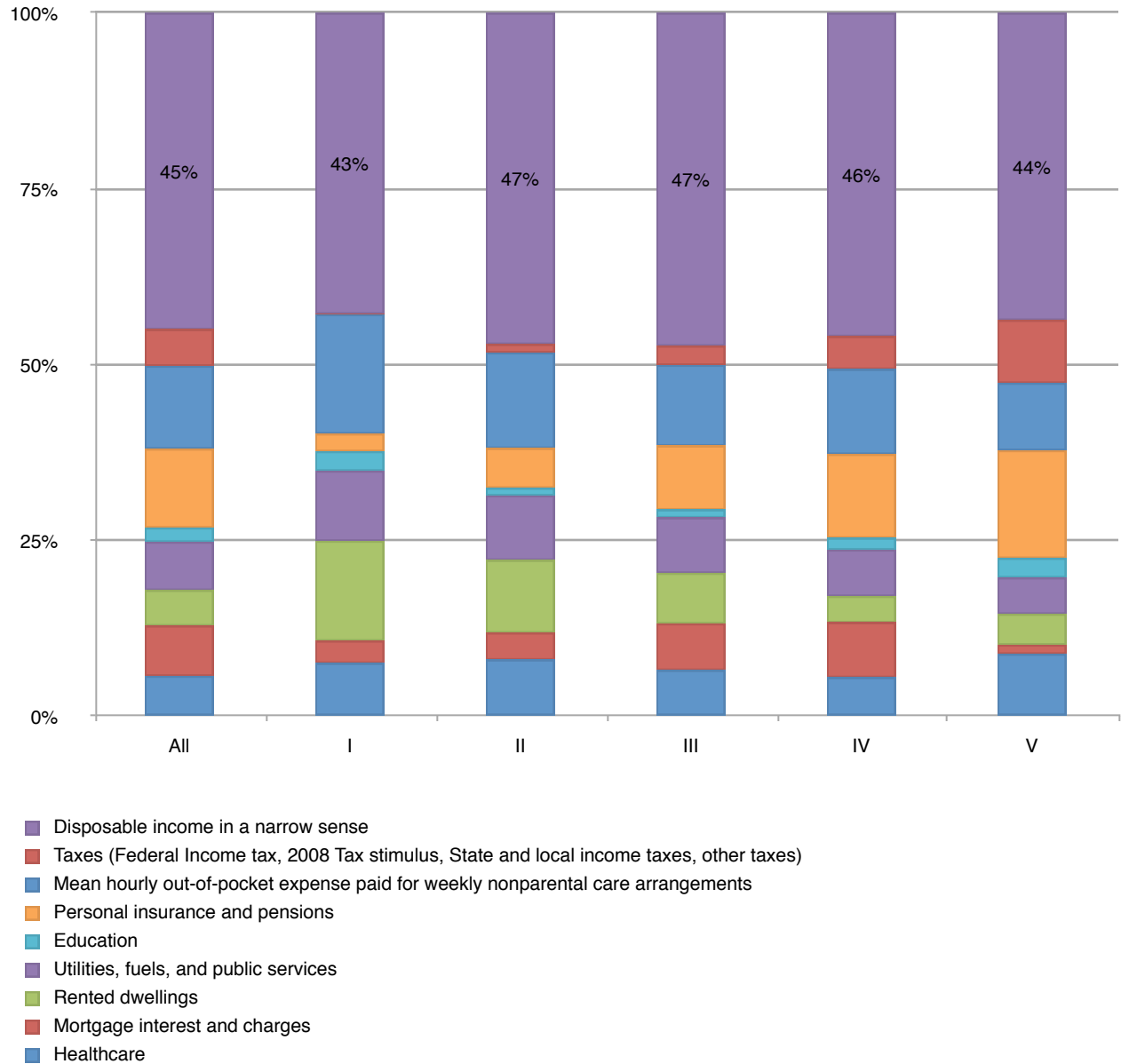
Y	Lowest quintile	Second quintile	Third quintile	Fourth quintile	Highest quintile
1970	5.70	12.10	17.30	23.40	41.50
1975	5.60	11.90	17.30	23.60	41.60
1980	5.20	11.60	17.30	24.00	41.90
1985	4.60	10.90	16.70	23.70	44.10
1990	4.40	10.60	16.30	23.50	45.10
1995	4.10	9.90	15.60	22.80	47.60
2000	4.10	9.80	15.20	22.30	48.60
2005	3.80	9.50	15.10	22.60	49.10
2010	3.40	9.20	15.00	23.10	49.20
2011	3.40	9.00	14.80	22.80	50.00

Source: U.S. Census Bureau, September 2012

3.2 For Consumers

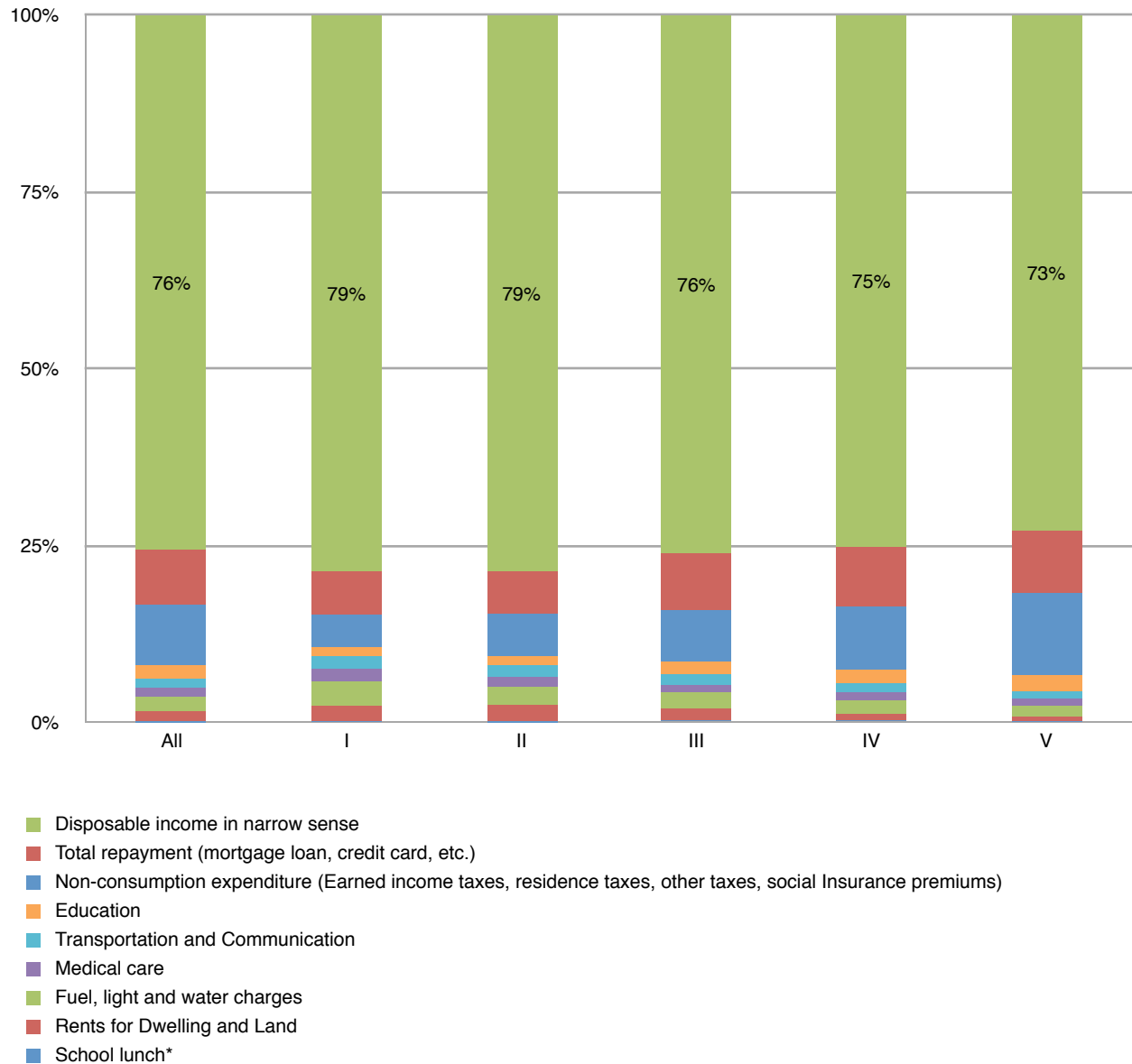
Families have a double role in the economy. They provide and reproduce the workforce for industries and services, and they are also the main consumers of those goods and services. Until now, we have seen how cost disease impacts the cost of labour, but it is equally important to understand its impact on the budgets of families. Cost disease has a double effect. On the one hand, the cost of many industrial goods has dropped considerably over time. This is the case if we consider tools, general utilities, and technological goods such as dishwashers, electric kitchen utilities, computers, cell phones, and various other gadgets. But at the same time, the cost of many vital services such as healthcare, education, childcare, and eldercare has skyrocketed. In 2005, for the first time since the great depression, the savings rate of American families turned negative before growing slightly positive again. Why have American households had such a hard time saving, and why have they been spending so much?

Figure 3.1 – Annual necessary payment and disposable income in narrow sense, quintiles (USA)



Source: Aki Aneha (Aneha, 2012) – Data: Consumer expenditure Survey 2007 and U.S. Department of Education Institute of Education Sciences, NHES 2005

Figure 3.2 – Annual necessary payment and disposable income in narrow sense, in quintiles (Japan)



Source: Aki Aneha (Aneha, 2012) – Data: Ministry of Internal Affairs and Communications, Statistics Bureau, Family Income and Expenditure Survey (* School lunch does not exist in U.S. Consumer expenditure survey)

As Aki Aneha shows in her comparative study of the budget of Japanese and American families, the disposable income of American households is much lower than their Japanese counterparts in perceptual terms. American households have an average of 45 percent of disposable income against the 76 percent of Japanese households. The share of consumption of American families is much more elevated in contrast with those of Japanese households, and the percentage of all private spending on these social consumption goods/services is about 53–57 percent in each income quintile. From Figure 3.1 and Figure 3.2, we can see that the elevated consumption of American households is not in luxury goods or extravagant needs, but is due to the necessity to face the cost disease of services. For American households, the cost of healthcare, insurance, and childcare is a burden that is significantly heavier than the one experienced by their Japanese counterparts. Aneha suggests that it is the lack of a proper welfare state in the United States that is producing this consumption pattern (Aneha, 2012).

In the Japanese distribution, we see how little the impact of medical care is over the whole distribution, while at the same time, in the American distribution, the share of money spent for personal insurance increases in every quintile. This perhaps leads us to suppose that there are different levels of coverage against risk and a persistent inequality of coverage among the people facing risks. In our interpretation, the Japanese example shows pretty well how welfare redistributes cost disease throughout the whole of society. In the United States, workers and families of all quintiles have to face the raw cost of services.

If we use bankruptcy as a proxy to understand the burdens of American families, following the study of Warren et al. (Warren & Tyagi, 2003) on reasons for bankruptcy, she shows that 87 percent of bankruptcies are caused principally by excessive medical expenses or unemployment. Only 13 percent are due to an excess of credit card debt or bad investments. Surprisingly enough, a lot of economic literature tends to ignore exogenous factors in explaining household debt, focusing research much more on the role of the agents and using a language not unspoiled by an ethical subtext (we have already seen authors who talk about *temptation* and *self-control*, like Nakajima (2011)). A lot of literature also underlines the importance of financial discipline and financial literacy as a significant factor in determining household debt use. All those studies are fundamental to improving our understanding of debt, but without considering all the exogenous factors influencing debt – the macro-sociological side of it – they fail to account for why families go into debt in the first place. In this section, we have identified the compression of wages and the rise in the cost of services as those macro factors.

4) Cost Disease: What Does it Mean for Banks and Monetary Policy?

4.1 For Banks

We have seen how cost disease impacts workers and consumers, so we will now focus on the other side of the coin; that is, how cost disease impacts the banking and financial sector, and how government has reacted to those challenges through monetary policy. We have already mentioned how the savings rate of families was particularly low in 2005, and still is, so obviously this must have an impact on how banks and the financial sector work. Banks traditionally used deposits to finance their activities, but this has changed radically over time, with important consequences on the role of families in the economic system and a series of consequences on how banks deal with risk.

Table 4.1 – Gross debt of U.S. Sectors (end of year percentage of GDP)

	1952	1980	2008
Nonfinancial sector	124	136	234
Households	25	48	96
Business	30	51	78
Government	68	37	60
Financial sector	3	20	119
Total	126	155	353

Source: Boston Consulting Group.

Table 4.2 – Net debt of U.S. Sectors (end of year percentage of GDP)

	1952	1980	2008

Nonfinancial sector	79	102	192
Households	-3	30	68
Business	19	40	67
Government	60	25	48
Financial sector	-82	-103	-152
Rest of the world	3	1	-40
Total	0	0	0

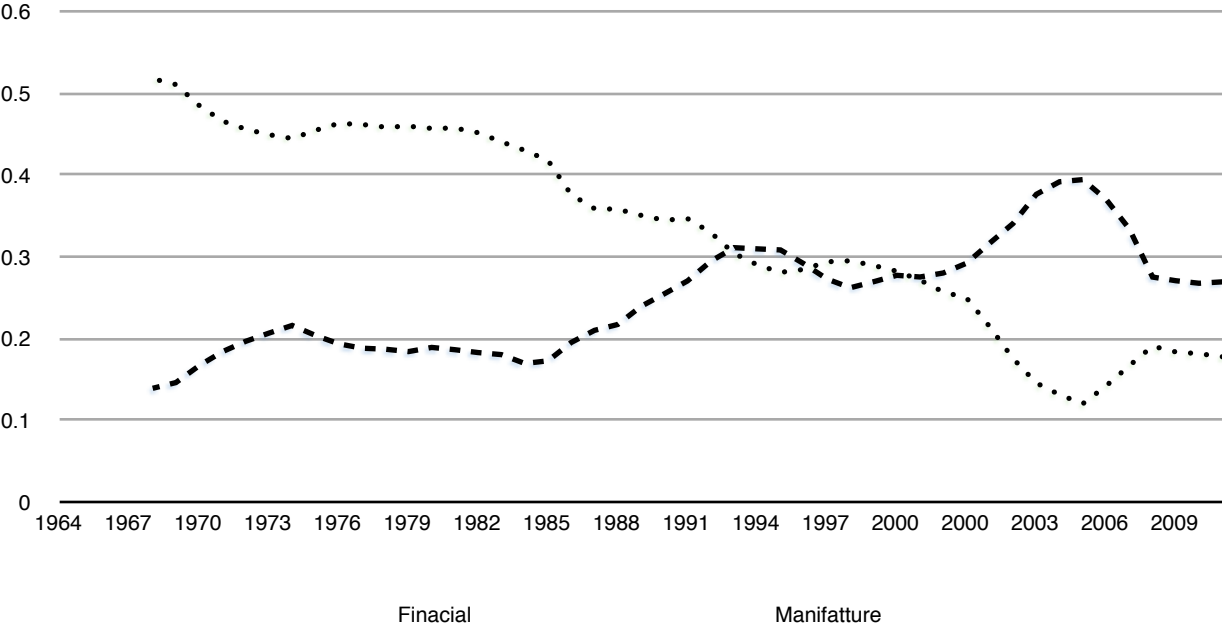
Source: Boston Consulting Group.

If we look at Table 4.2, we see that families have moved from being a net lender to the economy in 1952 (-3 net debt) to being a borrower entity today. At the same time, we see that the financial sector has increased its lending activities considerably. It is possible that the compression of wages and the general rise in the cost of services that households have to bear – the two main elements that we have considered in the previous section (part 3) – have played an important role in this marginalisation of the household sector as an active actor of the economic system.

At the same time, we see in Table 4.2 how the financial sector has increased lending considerably. How can we explain this shift? In the 1950s, households played a role as a borrower in the economy, and the savings of households helped the financing of the economy.

If we look at the distribution of profits, the financial sector has surpassed by far the profit generated by the manufacturing sector. The financial sector has become the central pillars of the economic life of nations.

Figure 4 – Share of profits financial sector and manufacture sector over the total USA (five-year moving average)



Source: Economic Report of the President, 2011 (author calculations)

Since the 1980s, one third of all domestic profits in the United States have been generated by the financial sector (dashed line in Figure 4), and in the first few years of the 2000s, this share rose to 40 percent in 2005. The shift from manufacturing (dotted) to the financial sector is evident. This marks the shift from an industrial society to one of services.

Montgomerie (2007) explains that from the end of World War II up until the 1970s, “there was a consensus in favor of demand-led Keynesian economic policies,” characterised by the quest for full employment and countercyclical spending during crisis. Industrial productivity permitted higher and increasing wages, and the expansion of the economy was achieved through aggregate demand and consumption. Perhaps a happy demographic expansion also keeps the numbers growing. The changing paradigm of the 1970s also changed the priority of economic policy and the structure of economy. We passed from a regime characterised by constantly rising wages to a period of increasing inequality (Table 3) and building a *precariat*. Aggregate demand was, together with full employment, one of the pillars of economic policy during the thirty glorious years of industrialism. Banks benefited from this regime of constant wage increases and enjoyed a period of stability. With the end of Keynesianism and the shift from an industrial economy to one based on finance and services (fig. 4), banks relied less and less on deposits to finance themselves and had to use capitalisation from the global pool of money created by the liberalisation of markets. If, until the 1960s, interest rates for banks’ lending and deposits were regulated, in United States there was a government-mandated interest rate ceiling, and in other countries, such as Italy and Germany, there were informal agreements between banks. With deregulation, the competition between banks increased considerably, as did the risk and uncertainty. In the past, regulation kept the system more predictable, and interests rate were, for the most part, fixed, meaning much less competition.

Risk has become a central topic in banking theory and practice, and a lot of research has gone to understanding how to master the new challenges posed by an unregulated environment. In financial engineering, new techniques were developed to counter risk and uncertainty. Another macro transformation was the end of the gold standard and the increased volatility of exchange rates, which brought about the development of new financially engineered techniques for risk management (Konzelman 2012). These new techniques permitted the development of the credit industry like never before and allowed for an important leverage increase and the dematerialization of markets (Stockhammer 2012).

Kevin Fox Gotham (2012) remarked how those new financial instruments permitted capital and the flux of finance to overcome the previous barriers created by regulation and geography, and how they became a truly global phenomenon. He says that those innovations permitted the creation of liquidity out of spatial fixity: “securitization is designed to reduce the uncertainty of buying and selling atypical assets (leases, homes, loans, etc.) by transforming them into marketing investments that have common features and characterisation.” Gotham argues that before the 1980s, consumer loans of all kinds, such as mortgages, student loans, and medical debt, were held in the balance sheet of banks and limited to that context, but that with the rise of securitisation, it was for the first time possible to repackage those “relatively illiquid” debts into “standardized, transparent, and interest-bearing securities for resale in global security markets.” To recapitulate, banks faced the increase of cost disease in the form of families' low savings and instability brought about by the metamorphoses of an accumulation paradigm developing new techniques of risk control and management. This permitted us to sustain important leverage and the commodification of credit with efficacy through the development of a global market of credit, which led to a significant amount of leverage.

4.2 For Monetary Policy

Oil shocks provoked a sort of cost-push inflation that contributed to, and was significantly exacerbated by, the demise of the Bretton Woods system (Grossman 2010), the last barbarous relic of the gold standard, which had granted economic stability to international exchanges for many years. After the inflationary crisis of the 1970s, governments radically changed their monetary policies, favouring high control of inflation over a monetary policy more focused on keeping unemployment low.

Those policies tried to achieve an *inflationless growth* (Montgomerie 2011). As the focus of the economic system shifted from production to finance, stable money was a necessity for the development of an economy based on the nominal value of money or quasi-money entities such as credit and more complex financial instruments such as derivatives and securities.

Inflation is an ambiguous concept; it can refer to a greater quantity of money in the economy, but as the concept is understood and operationalised today, inflation is the mean of all prices in an economy. Inflation means that the general level of prices is rising, and deflation is the declining mean of prices. Introducing cost disease, we have seen how the cost of services has been constantly rising since World War II, but how is an *inflationless growth* possible even if the cost of services is rising and influencing prices? As we said, inflation is a mean. This implies that rising prices in the service sector have to be compensated by a fall in prices elsewhere. We already know that the price of material goods such as computers, cell phones, and cars have become more affordable thanks to an improved productivity pushed by technological innovation. Also, delocalisation over the last decade has played an important role, as many western firms in the last thirty years have relocated their production to Asia, looking for cheap labour and trying to reduce the cost of production while maintaining or even increasing their share of profits.

As we have seen in section 4.1, this shift of focus from industry to finance has created a more unstable world. Managing this new environment would not have been possible without changes in financial instruments and regulations, and governmental monetary policy is an important element of this. The oil crisis of the 1970s marked a change of paradigm in monetary policy. During the industrialist period, monetary policy was focused on countercyclical measures and sustaining full employment. The notion of full employment was then ditched, and the new policies were centred on the idea of a natural rate of unemployment, also called the NAIRU (Non-Accelerating Inflation Rate of Unemployment). Other attempts to drive unemployment over the level of NAIRU were seen as “self-defeating and inflationary” (Mitchell 2013).

The control of inflation became a global priority for the G7 (also known as the Group of Seven). This was formed in 1975 after the fall of Bretton Woods and the end of the Gold Standard, grouping the seven most powerful economies in terms of GDP, which adopted in 1977 a resolution stating:

“Member countries making further progress against inflation will not come about its own accord. Determined action will be required to slow down the price/wage spiral. Some countries will need to pursue and some to reinforce vigorous stabilization policies” (OECD, 1977; Clauses 11)

The attention of the G7 countries was focused on the price/wage spiral that, according to the OECD, created inflation. The central tool used in inflation targeting was manipulation – by the central bank – of short-term interests rates charged to commercial banks.

The necessity of controlling inflation is another means of dealing with cost disease and trying to control the general level of prices. The main narrative used to promote the new anti-inflation policy was that inflation “create[s] uncertainty and inhibits investments” (OECD, 1977; Clause 9). Inflation control, together with the prevalence of the financial sector and bank innovations such as risk management (see

paragraph 4.1), set up particularly favourable circumstances for capital accumulation but difficult ones for employment.

Figure 5 – Unemployment in USA (thousands of persons 16 years of age and over)



Source: Economic Report of the President, 2011, Table B-91 (author calculations)

As we can see in Figure 5, since the 1980s, the problem of unemployment has become much more remarkable if we look at the previous twenty years (1960s and 1970s). The stability of the value of money demanded the offering of full employment, a sort of “sacrifice ratio.”

The distributional consequence of inflation is one of the most obscure fields in the social sciences. Grieder (Greider, 1989) conducted a number of interviews with former Federal Reserve Banks members and found that they all embraced the ideas that inflation-targeting policies had neutral distributional consequences and that the policies did not target anyone in particular. Central bankers felt as if they were pursuing a vision of sound economic management.

Seguino, Heinz, and Braunstein (Braunstein & Heintz, 2008; Seguino & Heintz, 2010; Seguino & Heintz, 2012) realized one of the few econometric studies on the distributional consequences of inflation-targeting by showing how the unemployment created by inflation-targeting did not affect society in a random way. “Costs of fighting inflation are unevenly distributed... A consistent finding is that African Americans bear a heavier burden of joblessness relative to whites in response to interest rate hikes.” Seguino revealed how those who are already poor tend to be the first victims of these types of monetary policies. Those in low-paying service sector jobs with little wealth are the first to become unemployed. She also shows how this is particularly true for women, as their male counterparts seem “more deserving,” confirming the relevance of the “breadwinner” stereotype. Marxist economist Robin Hahnel found a clear pattern of class conflict in inflation policies: “When inflation rates are higher than anticipated lenders receive a lower rate of return in real terms than they expected, while borrowers end up paying less in real terms than they thought they would have to. In general it is the wealthy who lend while the rest of us borrow. This is the first reason the wealthy – who are the clients the international financial industry serves – are more concerned than the rest of us should be with keeping inflation rates down.”

Another side effect of a high inflation control is the increasing difficulty for borrowers to repay debt. As we have seen in fig. 1, in the last decade the level of debt has grown in parallel with the level of borrowing, but that is not the case in the previous decades. Debt and borrowing are not synonyms; the level of

borrowing alone cannot explain the level of debt, and the debt is not a direct indicator of the level of borrowing. Inspired by the work of Irving Fisher, J. W. Mason and Arjun Jayadev (2013) studied private debt dynamics and showed with a counterfactual study that if during the 1980s and 1990s the levels of inflation would have remained the same as in the 1970s, the indebtedness of households today would be lower, independently of any changes in household behavior.

This is a well-known, yet extremely underrated, effect called the money illusion, as the pioneering mathematical economist Irving Fisher called it. Fisher noted that people tend to think in nominal terms about money, forgetting the real value of money. Many scholars, focusing their attention only on debt levels, tend to concur on the same issue. The nominal value of debt is not a meaningful measure without knowing the contextual figures. If a family borrows 100 in a context where inflation is moderately high, unemployment is low, and income is growing steadily, it is not the same as when a family borrows 100 in a context where inflation is 0 (money is “harder to find”), unemployment is high, and wages are low.

In this section, we have seen how banks adapted to a new environment and developed new financial techniques that permitted an unprecedented development of leverage in order to protect the new financial world stability of money as a prerequisite, and we saw why governments enacted those policies even when they were detrimental to employment and debt repayment.

5) From the Age of Money to the Age of Credit

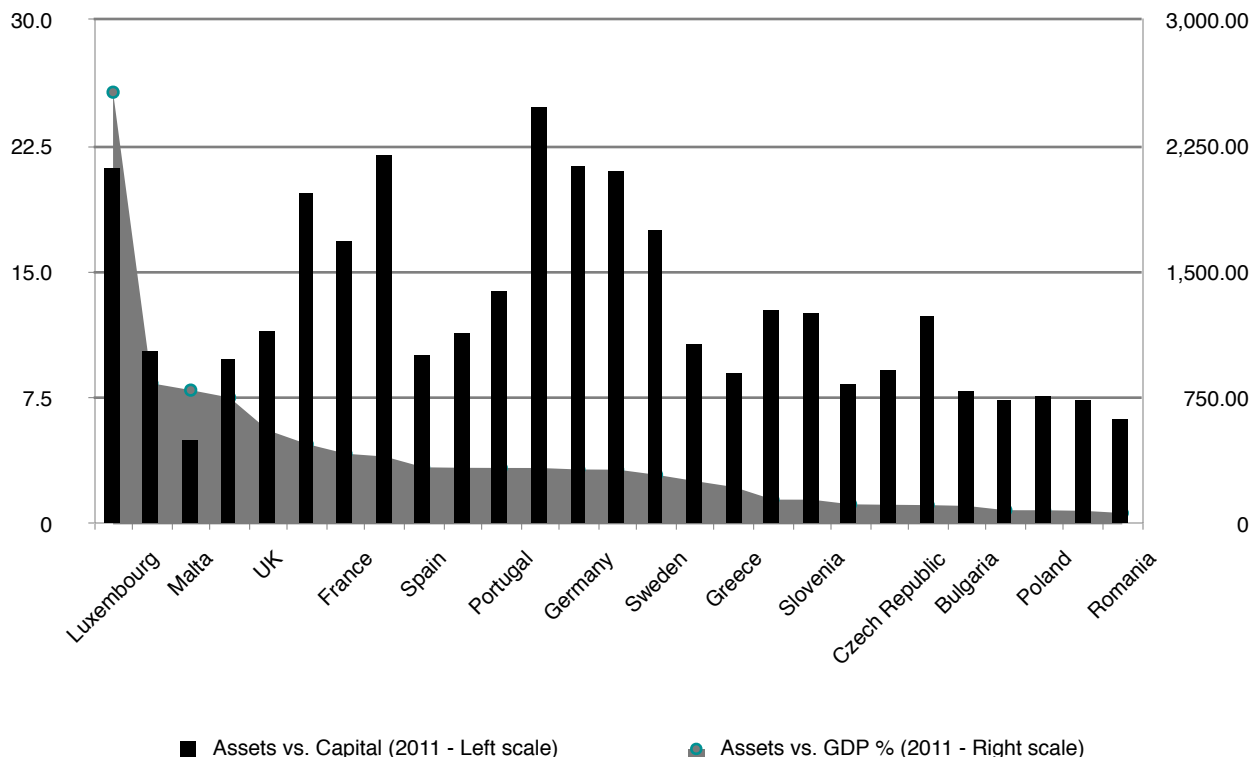
Here, we will recapitulate briefly what we have seen until now in the last two sections, and we will put the pieces of the puzzle together. In section 3.1, we saw how the labour market is influenced by cost disease: all new jobs are concentrated on the service sector (Table 2). This happens because, given the nature of service sector jobs and their productivity dynamics, to increase productivity, it is also necessary to increase the amount of labour. We also saw how a good portion of those new jobs are in fact, by their nature, low-paying jobs. In section 4.1, we saw how the end of the stability which characterised the Bretton Woods period and the consequent deregulation of the banking sector pushed banks to develop the engineered financial instruments necessary to manage the risk and uncertainty created by the fall of the traditional role of families as savers and the development of an highly volatile world market. In 4.2, we saw how, in response to the same challenges of an open world of international capital and volatility, control of inflation has become a political priority, even if detrimental to full employment, and more importantly to our discourse, it has made private debt even more difficult to repay.

As Schumpeter remarked in his work *Das Wesen des Geldes* (Schumpeter, ****), monetary policy is politics *tout-court*. Economic science can try to describe and explain the trends of a monetary system, but it cannot – on its own – set a final objective or decide what is good or bad, or what is right or wrong. This is the role of politics, and it is decided by those who aspire to impose their organised interests over the interests of others. He also remarks on how inflation is favourable to those who borrow and is hostile to those who own the capital. We therefore read the events of the last few decades as a political victory for those who own the capital, as their interests were protected better than other societal issues such as, for example, full employment.

In these graphs, we have a rise of unemployment (fig. 5) partly influenced by the focus on inflation control, and in table 3 we can see a lower income share for the four lower quintiles of income distribution except the last, which means more inequality. Finally, banks had to invent new methods to face this instability. Great demand for credit came from families that needed liquidity to face the growing cost of welfare services or tried to secure their future through investments in the housing market, shaping an “asset-based welfare” (Hay, 2011).

Alan. M. Taylor (Taylor, 2012) proposed calling this a macro transition from the “Age of Money” to the “Age of Credit,” as he remarked that during the three decades of industrialism (1940s, 1950s, and 1960s), the ratio of loans to money was stable, but that with the 1970s this changed radically; in the balance sheet of banks, the ratio of loans to GDP exploded.

Figure 6 – Assets vs. Capital (Black – Left scale) Assets vs. GDP percentage (Grey – Right scale), 2011



Source: European Banking Federation - EBF Banking Sector Statistics Database 2011 (author calculations)

If we look at the situation of European banks in 2011, we see how the ratio of credit extended is 2572 percent greater than GDP in the case of Luxembourg, and the credit extended by banks in Cyprus is 754 percent greater than the GDP of the tiny Mediterranean island (grey area in Figure 6, right scale). At the same time, we see how banks in Finland, Germany, Belgium, the Netherlands, Denmark, and France have a leverage that is many times their assets, more than twenty-three times in the case of Finland.

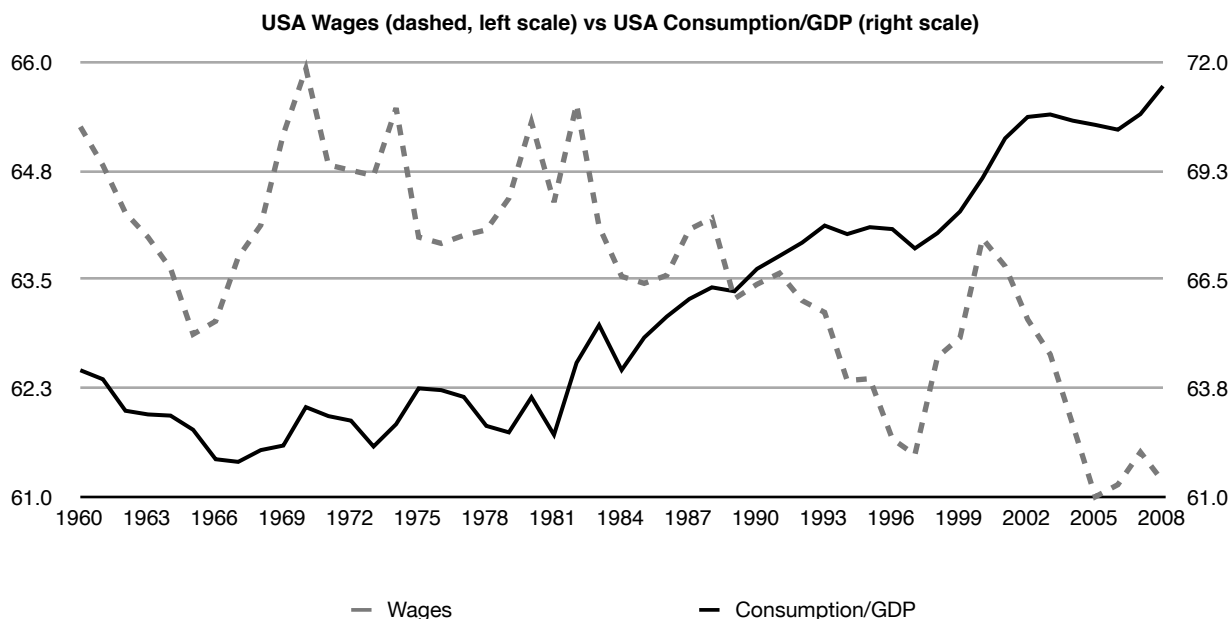
If money was previously created by the state, with the monetarist revolution money is mainly created by private banks through leverage. Taylor remarks on how “we can compare private debt creation via the banks with public debt creation. The trends since 1945 are striking, and show almost complete inversion. The scale of the increase in the balance sheets in the banking sector has effectively flipped the main credit risk nexus, as measured by debt magnitude, from the sovereign side to the baking side.”

As the creation of money became mostly a result of the banks' business through credit, banks leveraged without fear. Taylor offers two explanations for this increase. His first explanation is that banks “pushed further the volume/leverage/risk frontier;” as we said in section 4.1; his second explanation is that banks used leverage because they knew how to protect themselves against eventual problems or the effect of having a Lender of Last resort, “the moral hazard argument.”

The countries in the Eurozone are a particular case, as they no longer have monetary sovereignty. They can only borrow on the markets, inflating banks' balance sheets. Banks own the debts of nations in their high-leveraged balance sheet, which is why the perspective of a country defaulting is quite frightening for the whole financial sector. It could lead to a series of defaults.

In the United States in particular, debt assumed a pivotal role for the economy. Debt is what allowed consumption to rise, in spite of the fall in wages, as we see in Figure 7 and as we described in Table 3.

Figure 7 - Wages (left scale) vs. Consumption/GDP (right scale)



Source: European Commission - AMECO Annual macro-economic database - http://ec.europa.eu/economy_finance/db_indicators/ameco/ (author calculations)

Credit was used, particularly in those states with weak welfare systems (Montgomerie, 2006b; Montgomerie, 2006a; Montgomerie, 2007b; Montgomerie, 2007a; Prasad, 2012; Soederberg, 2012a; Soederberg, 2012b; Trumbull, 2012) as a means to compensate for this fall in wages and keep the aggregate demand constant, creating a regime that Collin Crouch called “private Keynesianism.”

If the cost disease problem is solved with debt, the risk is an increase in the instability of the whole economy, as Fisher and Minsky explained. The recent crisis of 2008 was created by the excessive leverage of banks in regard to the real economy (Sornette & Cauwels, 2012).

Following Fisher's classic theory of debt deflation, a crisis starts when debt repayment reduces the quantity of circulating money, because when credit is issued it creates money, but when debt is repaid, money is wiped out: “The more the debtors pay, the more they owe. The more the economic boat tips, the more it tends to tip. It is not righting itself, but is capsizing” (Fisher, 1933). He then explained that debt leveraging leads to a sequence of (1) as money is rarer, the value of money rises; (2) the lack of demand pushes down trade and profits; (3) for the same reasons, employment cannot be sustained; (4) investors become cautious; (5) the velocity of money slows down; (6) central banks push interest rates to a minimum; and (7) but the interest rates are still too high.

The solution used in the United States is a courageous and unconventional monetary policy that does not limit itself to pushing interest rates to a minimum (which is not sufficient in a liquidity trap), but tries instead to inject more money into the system, easing constraints for the borrowers and stimulating employment – a quantitative easing. In Europe, the European Central Bank sticks (at least officially) to a policy of inflation control, limiting severely the possibility of intervention. The redistributive effects of this policy are very well felt, as unemployment is rising nearly everywhere in Europe: France shows the highest ratio of unemployment in years, and the ratio of Spain's youth unemployment is near to being a humanitarian crisis, with mass migration of the workforce. The same is true for Latvia, which lost 10 percent of its population through emigration during the crisis.

6) Conclusions

Alternatively, from economic research that studying debt has focused its attention only on family behaviors and values – even with a moral subtext – sociologists underlined the importance of contextual factors. The main problem in testing exogenous factors is the rough complexity of the task. Many concurring variables and phenomena can influence the distribution of debt, and as I hope it is clear, debt itself is a difficult concept to handle and can be misleading.

In this paper I tried to delineate an hypothesis about how a macro shift in the accumulation regime has radically changed the economic landscape for workers, consumers, financial intermediaries, and the financial market. Debt played a crucial role in those mutations, and focusing my attention on the Anglo-Saxon context in particular, I wanted to give an alternative explanation to its rise, even if borrowing not augmented for several years. With a service economy, families are, as a whole, more fragile, and even if they do not borrow more, they often feel debt burden as more heavily.

Those conclusions may have important political consequences: the crisis did not happen because obtaining credit was too easy, as many conservatives commenters remarked, or at least, not only because obtaining credit was too easy. A fragile economic structure, with a growing share of low-paying service jobs, may have exacerbated the economic inequalities, thus making it more difficult for families to deleverage in time of crisis.

Another problem is that the redistributive nature of the monetary and credit system are not well known, as they have never been the subject of a systematic study by sociologists, and their importance is always somewhat underrated. An alternative theoretical approach can be developed to understand the real role of money in society (Fantacci, 2005) and can be understood as public goods (Birner, 2012).

As Baumol suggests (Baumol, 2012), the problem of cost disease is not resolved by further cutting welfare, and if debt is used as a replacement, those policies can even exacerbate macroeconomic instability. The real problem is one “of distribution, with poor people being denied welfare, even when the community taken as a group can easily afford it.”

Bibliography

- Aneha, A. (2012). 16 Overconsumption, household debt, and dollar-privilege. *Crises of Global Economy and the Future of Capitalism*, Edited by Kiichiro Yagi, Nobuharu Yokokawa, Hagiwara Shinjiro, Gary Dymski, Routledge.
- Baumol, W.J. (1967). Macroeconomics of unbalanced growth: the anatomy of urban crisis. *The American Economic Review*, Retrieved from <http://www.jstor.org/stable/10.2307/1812111>
- Baumol, W.J. (1993). Health care, education and the cost disease: a looming crisis for public choice. In *The Next Twenty-Five Years of Public Choice* (pp. 17-28). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-94-017-3402-8_3
- Baumol, W.J. (2012). *The Cost Disease: Why Computers Get Cheaper and Health Care Doesn't*. Yale University Press.
- Baumol, W.J., & Bowen, W. G. (1993). Performing arts-the economic dilemma: a study of problems common to theater, opera, music and dance. *Gregg Revivals*. Retrieved from <http://www.cabdirect.org/abstracts/19941800702.html>
- Baumol, W.J., Blackman, S. A. B., & Wolff, E. N. (1985). Unbalanced growth revisited: asymptotic stagnancy and new evidence. *The American Economic Review*, 806-817. Retrieved from <http://www.jstor.org/stable/10.2307/1821357>
- Birner, J. (2012). If bad money is a collective bad, isn't good money a collective good? *Corvinus Journal of Sociology and Social Policy*, 2), 3-38. Retrieved from <http://cjssp.uni-corvinus.hu/index.php/cjssp/article/viewFile/63/42>
- Braunstein, E., & Heintz, J. (2008). Gender bias and central bank policy: employment and inflation reduction. *International Review of Applied Economics*, 22(2), 173-186. Retrieved from http://www.networkideas.org/feathm/oct2007/pdf/Elissa_James.pdf
- dos Santos, P. L. (2012). A cause for policy concern: the expansion of household credit in middle-income economies. *International Review of Applied Economics*, ahead-of-print), 1-23.
- Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton University Press.
- Esping-Andersen, G. (1999). *Social Foundations of Postindustrial Economies*. Oxford University Press, USA.
- Fantacci, L. (2005). *La moneta. Storia di un'istituzione mancata*. Marsilio.
- Fisher, I. (1933). The debt-deflation theory of great depressions. *Econometrica: Journal of the Econometric Society*, 337-357. Retrieved from <http://www.jstor.org/stable/10.2307/1907327>
- Fligstein, N., & Goldstein, A. (2010). The anatomy of the mortgage securitization crisis. *Research in the Sociology of Organizations*, 30, 29-70.
- Fligstein, N., & Goldstein, A. (2011). *Catalyst of Disaster: Subprime Mortgage Securitization and the Roots of the Great Recession*.
- Gerba E., & Schelkle W. (2013). *The finance-welfare state nexus of the crisis*. EUSA, Baltimore, May 2013.
- Goldthorpe, J. H. (1978). The current inflation: towards a sociological account. *The political economy of inflation*, 186-214.
- Goldthorpe, J. H. (2004). The economic basis of social class. LSE STICERD Research Paper No. CASE080, Retrieved from http://eprints.lse.ac.uk/6312/1/The_Economic_Basis_of_Social_Class.pdf
- Greider, W. (1989). *Secrets of the temple : how the Federal Reserve runs the country* (1st Touchstone ed. ed.). New York: Simon & Schuster. Retrieved from <http://www.loc.gov/catdir/bios/simon051/88026696.html>
- Gul, F., & Pesendorfer, W. (2004). Self-control, revealed preference and consumption choice. *Review of Economic Dynamics*, 7(2), 243-264. Retrieved from http://www.econ.hit-u.ac.jp/~kmlj/uncertainty/gul_04_selfcontrol.pdf
- Hay, C. (2011). Pathology Without Crisis? The Strange Demise of the Anglo-Liberal Growth Model. *Government and Opposition*, 46(1), 1-31. Retrieved from http://www.astrid.eu/Dossier--d1/Studi--ric/Hay_Gov-and-Oppos_1_2011.pdf
- Hirsch, F., & Goldthorpe, J. H. (1978). *The political economy of inflation*. Harvard University Press.

- Howard, C. (1999). *The hidden welfare state: Tax expenditures and social policy in the United States*. Princeton University Press. Retrieved from <http://www.democracyjournal.org/pdf/4/048-058.howard.FINAL.pdf>
- Jayadev, JM and Jayadev, A. (2013). *Fisher Dynamics in Household Debt: The Case of the U.S. 1929-2011*. University of Massachusetts Boston, Economics Department.
- Keen, Steve. 2009. "Household Debt : The Final Stage in an Artificially Extended Ponzi Bubble." *The Australian Economic Review* 42 (3).
- Keen, Steve. 2012. "Economics without a blind-spot on debt." Steve Keen's Debtwatch, March 15th, <http://www.debtdeflation.com/blogs/2012/03/15/economics-without-a-blind-spot-on-debt/>.
- MacKenzie, D. (2011). The Credit Crisis as a Problem in the Sociology of Knowledge. *American Journal of Sociology*, 116(6), 1778-1841.
- Manning, Robert D. 2001. *Credit Card Nation: The Consequences of America's Addiction to Debt*. New York, NY: Basic Books.
- Marron, Donncha. 2009. *Consumer Credit in the United States: A Sociological Perspective from the 19th Century to the Present*. Palgrave Macmillan.
- Montgomerie, J. (2006a). Giving Credit where it's Due: Public Policy and Household Debt in the United States, the United Kingdom and Canada. *Policy and Society*, 25(3), 109-141. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1449403506700856>
- Montgomerie, J. (2006b). The financialization of the American credit card industry. *Competition & Change*, 10(3), 301-319. Retrieved from <http://www.ingentaconnect.com/content/maney/com/2006/00000010/00000003/art00003>
- Montgomerie, J. (2007a). Financialization and consumption: an alternative account of rising consumer debt levels in Anglo-America.
- Montgomerie, J. (2007b). The Logic of Neo-Liberalism and the Political Economy of Consumer Debt-Led Growth. In *Neo-Liberalism, State Power and Global Governance* (pp. 157-172). Springer.
- Nakajima, M. (2012). Rising indebtedness and temptation: A welfare analysis. *Quantitative Economics*, 3(2), 257-288. Retrieved from <http://onlinelibrary.wiley.com/doi/10.3982/QE87/pdf>
- Pellicani, L. (1994). *The Genesis of Capitalism and the Origins of Modernity*. Telos Press Ltd.
- Polanyi, K. (1944). *The great transformation*. New York, Toronto: Farrar & Rinehart, inc.
- Polanyi, K. (2011). *La subsistance de l'homme : La place de l'économie dans l'histoire et la société*. Flammarion.
- Poon, M. (2007). Scorecards as devices for consumer credit: the case of Fair, Isaac & Company Incorporated. *The sociological review*, 55(s2), 284-306.
- Poon, M. (2009). From new deal institutions to capital markets: Commercial consumer risk scores and the making of subprime mortgage finance. *Accounting, Organizations and Society*, 34(5), 654-674.
- Prasad, M. (2012). *The Land of Too Much: American Abundance and the Paradox of Poverty*. Harvard University Press.
- Ritzer, George. 1995. *Expressing America: A Critique of the Global Credit Card Society*. Thousand Oaks, CA: Pine Forge Press, 1995.
- Ritzer, George. 2011. "Ignoring Credit and Consumption Discredits Sociology." *Contemporary Sociology: A Journal of Reviews* 40 (4) (July 1): 417-420.
- Schooley, D. K., & Worden, D. D. (2010). Fueling the Credit Crisis: Who Uses Consumer Credit and What Drives Debt Burden&quest. *Business economics*, 45(4), 266-276. Retrieved from <http://www.palgrave-journals.com/be/journal/v45/n4/abs/be201025a.html>
- Schooley, Diane K, and Debra Drecnik Worden. 2010. "Fueling the Credit Crisis: Who Uses Consumer Credit and What Drives Debt Burden." *Business Economics* 45 (4) (October 1): 266-276. doi:10.1057/be.2010.25.
- Schumpeter, J. A. (1996) *Trattato della moneta: capitoli inediti*. ESI Napoli.

- Schumpeter, J. A. (2012). *Théorie de la monnaie et de la banque I: L'essence de la monnaie.*, 289.
- Seguino, S., & Heintz, J. (2010). Contractionary monetary policy and the dynamics of US race and gender stratification. *Political Economy Research Institute Working Paper Series*, 230). Retrieved from <http://www.uvm.edu/~sseguino/pdf/MP.pdf>
- Seguino, S., & Heintz, J. (2012). Monetary tightening and the dynamics of US race and gender stratification. *American Journal of Economics and Sociology*, 71(3), 603-638. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1536-7150.2012.00826.x/full>
- Soederberg, S. (2012a). The Mexican Debtfare State: Dispossession, Micro-Lending, and the Surplus Population. *Globalizations*, 9(4), 561-575. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/14747731.2012.699932>
- Soederberg, S. (2012b). The US Debtfare State and the Credit Card Industry: Forging Spaces of Dispossession. *Antipode.*, Retrieved from <http://cips.uottawa.ca/wp-content/uploads/2012/01/Debtfare-Soederberg-Antipode-Jan-2012.pdf>
- Sornette, D., & Cauwels, P. (2012). The Illusion of the Perpetual Money Machine. *J arXiv preprint arXiv:1212.2833.* Retrieved from <http://arxiv.org/pdf/1212.2833>
- Taylor, A. M. (2012). The great leveraging. Retrieved from <http://www.bis.org/events/conf120621/taylor.pdf>
- Trumbull, G. (2012). Credit Access and Social Welfare The Rise of Consumer Lending in the United States and France. *Politics & Society*, 40(1), 9-34. Retrieved from <http://pas.sagepub.com/content/40/1/9.full.pdf>
- Turinetti, Erin, and Hong Zhuang. Exploring Determinants Of U.S. Household Debt. *Journal of Applied Business Research (JABR)*.
- Warren, E., & Tyagi, A. W. (2003). *The two-income trap: Why middle-class mothers and fathers are going broke.* Basic Books (AZ).