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Article

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Reference

VALLET, Guillaume Antoine. 'Think twice': using economics and sociology to understand monetary issues. The case of Switzerland. *Revue internationale de sociologie*, 2016, vol. 27, no. 1, p. 160-178

DOI: 10.1080/03906701.2016.1223044

Available at: http://archive-ouverte.unige.ch/unige:94462

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International Review of Sociology



Revue Internationale de Sociologie

ISSN: 0390-6701 (Print) 1469-9273 (Online) Journal homepage: http://www.tandfonline.com/loi/cirs20

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To cite this article: Guillaume Vallet (2017) 'Think twice': using economics and sociology to understand monetary issues—The case of Switzerland, International Review of Sociology, 27:1, 160-178, DOI: 10.1080/03906701.2016.1223044

To link to this article: http://dx.doi.org/10.1080/03906701.2016.1223044

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'Think twice': using economics and sociology to understand monetary issues-The case of Switzerland

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ABSTRACT

This paper seeks to demonstrate to what extent an academic approach that borrows from economics and sociology is heuristic in terms of fully understanding monetary issues. Contrary to authors that consider money to be neutral, this article emphasizes that money is a 'total social fact'. Hence, it focuses on three meanings of money through the theoretical framework of Schumpeter and various French institutionalists. It also focuses on the Swiss case, which is particularly relevant because money plays a significant role in order for such a country to foster prosperity and create social links. Finally, there is clearly a high usefulness of a pluralistic approach on the monetary issue for heterodox economists.

ARTICLE HISTORY

Received 20 January 2016 Accepted 20 July 2016

KEYWORDS

Sociology; economics; Switzerland; Swiss franc; money

1. Introduction

The ongoing crisis has raised important questions about monetary issues, especially in Europe. Indeed, problems with the euro have shed light on what we call here 'the meanings of money', referring to the economic and social meaning citizens give to the money they use. As such, this paper will focus on the symbolism of money, and attempt to answer why money is so valued by its people.

But the symbolism of money has to be related to the 'real' framework in the sense that 'production cannot be differentiated from monetary creation' (Rochon 2000, p. 144), the former necessarily implying the latter. In other words, the arguments presented in this paper are wholly consistent with the endogenous money framework where money is at the core of the linkages between firms, banks, households and the state, although we focus on the fact that such a framework can only exist and last if money refers to a people's societal project. We then go back to the symbolism of money.

Indeed, from the previous explanations it can be argued that money embodies a collective project that is money is the social link between citizens, although money is also the implementation of monetary policy and the institutions holding money. In particular, we are interested in three meanings: the significance, the direction and the emotion of money. Undoubtedly this brings up a social dimension to the discussion of money, but

as pioneers such as Simmel have deduced (Simmel 2004), money is more than just an economic asset, embodying all the relevant topics of a society: 'Money as a measure of value is a "collective representation" for which the analogue is the structure of society' (Ingham 1996, p. 519).

Thus, given these three 'meanings of money', we argue that a pluralistic perspective is sometimes necessary in order to analyze monetary issues. Since money embodies societal issues, and given that economics is arguably embedded in both social and political life, using social concepts in economics necessitates the utilization of sociology. Rather, we should say we need what Orlean calls an 'unidisciplinarity' of money: if we want to understand money in its totality, borrowing from several social sciences becomes necessary (Orléan 2008). This reminds us what Mauss used to call a 'total social fact' (1966), referring to 'an activity that has implications throughout society, in the economic, legal, political, and religious spheres' (Edgar and Sedgwick 2008, p. 76). Here that means we will consider money is at the core of a human society, in the sense given above by Simmel and Ingham, because it is a central institution transcending individuals as well as exercising a social constraint. Money is then 'total' because it ties individuals each other as well as its ties between them and the society cannot be cut away.

While many authors have discussed this before, both in economics and in sociology as Steiner and Gislain (1995) highlight, here we consider two approaches in particular that we believe are complementary: Schumpeter (2014) and the 'French institutionnalists of money' (Aglietta and Orléan 2002, Théret 2008). Note that we are not dealing with the creation of money as discussed by post-keynesians and circuit authors (see for instance, Rochon 1999), but rather with the discussion of the meaning of money in the institutionnalist perspectives quoted above.

This essay is divided into the following three parts. The second section presents a brief discussion of the three meanings of money. Section 3 presents the pluralistic theoretical framework that will be used to discuss monetary issues. In section four we discuss and focus our discussion on the Swiss case because it fits the theoretical framework extremely well. The fifth and last part brings concluding remarks.

2. The three meanings of money

As discussed above, this section offers a brief description of what is suggested by the 'meanings' of money. More specifically, we identify three meanings of money: the significance, the direction and the emotion of money. These are defined in turn below.

2.1. The significance of money

The first meaning deals with the following issues: what is the significance of money for those that use it? In particular, the unit of account function is important here because it anchors the behaviours of economic actors through the definition of the monopoly or hierarchy between monies in a given monetary space. More importantly, the significance of money deals with social links transcending individuals, because this function is imposed on all individuals (Simiand 1934). This approach is then at the opposite of the one defended by neoclassical theory, which argues that money's value arises from its role in individual trade.

Conversely, with such a societal dimension referring to an essence, an intrinsic value, money unites people beyond their immediate economic interest: temporal stability of the unit of account function allows confidence durably, indicating that the essence of money is not linked to short-lived trade. In other words, we refer again here to Simiand (1934) who argues that the essence of an institution – money – has an objective dimension uniting people because it belongs straight away to a society. The symbolism of money is related to the essence of money through its function as a unit of account.

Furthermore, the store of value function is sometimes concerned because money is likely to represent a safe haven. At the opposite of neoclassicals' conception, people can hold money even it is not useful for transactions. If uncertainty is concerned, that means that money is demanded for itself, and then it could have the status of safe haven. Hence money is clearly here an institution because it 'provides assurances of the continuity between the present and the future which is necessary if one is going to hold money as a store of value' (Davidson 1972, p. 106).

Finally, this also concerns the purchasing power of money in a monetary space. Given that 'money appears in the economy along with production' (Rochon and Rossi 2013, p. 214), the purchasing power of money is tied to the ability of a zone to produce and employ people for this purpose. Thus a currency is identifiable with production in the same space. Thanks to this production, money measures production and is defined as purchasing power (Monvoisin 2013). Thus, people will either accept or reject money depending upon its ability to give them such prosperity. Hence, 'as a matter of fact, it is impossible to study economics, in particular macroeconomics, without first understanding the conception of money, its logical origin and creation, and how money is linked to production and income' (Rochon and Rossi 2013, p. 211).

2.2. The direction of money

What is the social and political project associated with money? This influences the implementation of monetary policy and the associated fiscal policy, and refers to two central functions of money, emphasized by Keynesians: the economy's financing and the implementation of economic policy (Le Héron 2013). In other words, monetary policies have to reflect the social and political project that was quoted previously. Indeed, 'money is a social phenomenon, and many of its current features depend on what people think it is or ought to be' (Harrod 1969, p. X).

Even though central bankers are experts at setting monetary policy in a 'technocratic' way, they nevertheless have to engage in a clear democratic framework. In other words, their mission must be democratic and they must be accountable for their decisions. Credibility is not sufficient here: we are also dealing with confidence, commitment and consent. The latter is especially important in the monetary framework: people accept money because they agree with a project and the institutions that hold it, as well as trusting in one another to accept it in their transactions (Orléan 2008). In the maussian perspective quoted above, money is clearly here a 'total social fact' because it succeeds in uniting in the same time traders and the whole monetary system, the latter being embedded in a societal framework.

If monetary policies do not fit the collective interest, people are likely to reject both them and the institutions that hold money. Unfortunately, the European case sustains effort in that direction.

2.3. The emotion of money

This refers to the psycho-sociological dimension of money, because history, social link and social norms are concerned here. Money is not just a useful medium of exchange in a network; it has a supra-individual life, because money is straight away the community that it embodies. This refers to what we discussed above with respect to Simiand, and especially with respect to the essence of money. And of course, this meaning strongly embodies the symbolism of money and money as a 'total social fact' as Mauss used to give a 'mystic' dimension to this concept. This explains again why money doesn't only deal with economics: in history, people have attributed 'worth to a medium whose physical characteristics are essentially irrelevant to its monetary role' (Carruthers and Babb 1996, p. 1556).

Thus these three meanings of money indicate the extent to which money is a 'total social fact'. Along with economic features, there are societal pillars of money referring to a collective project. The latter implies choices – of a unit account and a type of monetary policy - confidence between citizens and between citizens and institutions holding money, and durability - a duration of life and a strength, which is imposed on all individuals beyond their immediate interactions. That is why such dimensions cannot be fully understood only with economics. On the contrary, a pluralistic approach to money is needed, as we explain in the next section.

3. A pluralistic approach to money issues: two key theoretical frameworks

In academic literature, some authors underline the neutrality of money, meaning that money does not matter for economic production or social issues. If Turgot's expression 'every money is a good, all goods are money' sustains efforts in that direction, one can also refer to famous, more recent articles emphasizing such a (non) property of money, for example, Kydland and Prescott's 'Rules rather than Discretion' (Kydland and Prescott 1977). On the other hand, a different perspective will be presented here, stressing the fact that 'money matters', from both an economic and sociological perspective.

Such an approach implies considering money as an institution in the continuation of the essence of money, and of course of the 'total social fact' quoted above. We use Schumpeter's institutional monetary framework, as well as the French institutional approach to monetary issues. Obviously, they are different, for a number of reasons: they were not established at the same time, and they don't seek to analyze precisely the same purpose. However, we will try to explain why they appear to be complementary in this regard.

As far as the Schumpeterian framework is concerned, it is worth remembering that the Austrian economist used to consider that there were four methodological approaches to realizing a complete economic analysis: history, statistics, theory and economic sociology (Steiner and Gislain 1995). If the latter weren't considered by Schumpeter to be equal to economics, given that sociology only had to complete the economic analysis, it nevertheless played a central role in understanding fully society's issues. According to Schumpeter, when you deal with complex issues, you have to rely on a broader approach, implying the embeddedness of economic problems in a social and historic environment. Henceforth, this is the case for money, as the central institution of evolving capitalism: 'The main function of the money or capital market is trading in credit for the purpose of financing development' (Schumpeter 1961, pp. 126–7).

Schumpeter then distinguished between the commodity theory and the claim theory of money (Ingham 2003): the first deals with the neutrality of money, while the second refers to monetary economy with the 'capitalistic function of money', which was the speculative financing of future production by means of freely available 'claims' or 'credits' produced by the banking system (Schumpeter 1917, p. 206). Such credits entail a useful debt, allowing the total expenses to be superior to total income from a macroeconomic perspective.

Hence, this 'total credit' (fully covered credit plus debt-financed expenditure by entrepreneurs), as Keen (2014, p. 272) calls it, is necessary in order for the monetary economy to work. The endogenous framework clearly takes place here again through the relationship between money and production through the mediation of claims and debts. More accurately, there is a triangular relationship as far as this relationship is concerned: bank debts to households and households claim on banks, but also firms' credits to bank/firms for households in terms of products, and bank debts on firms/households for the product (Monvoisin 2013).

As Schumpeter's PhD student, Minsky, summarizes: 'Schumpeter brought to the analysis of a monetary production economy the sense of the economy as an evolving institutional structure. Nowhere is market-driven institutional evolution (innovation) more apparent than in the financial sphere' (Minsky 1992, p. 113). According to Schumpeter, 'capitalism is a monetary system where money is transversal, implying that all economic transactions rely on monetary rules and relations and all economic existence is under the weight of monetary changes' (Ülgen 2014, p. 258). This takes place through innovations emerging from both entrepreneurs' and bankers' decisions within an endogenous bank credit framework (Schumpeter 1939).

However, according to Schumpeter, money goes beyond this. First, similarly to the previous element, money is tied to a banking system and then to a State. As the sociologist's 'model' of Max Weber highlighted, the growing assertion of the power of the State depends on national debt because it supports transferable private debt through the banking system. In other words, a monetary production economy needs the entrepreneur, the banker and the State in order to create an efficient, credit-driven macroeconomic system whereby money gathers these three institutions of capitalism. Henceforth, money entails social relations with strong relationships between borrowers and lenders with debt (Rochon and Rossi 2013).

Second, Schumpeter highlights the sociological dimension of money (Schumpeter 2005). Money is about a collective project in the sense that 'everything that a people desires, does, suffers, is – is reflected in a people's monetary system' (Schumpeter 2014, p. XIV). Hence, the way in which the monetary policy is set up is particularly important, because it has to fit such a people's desire. In effect, his vision is clear: 'Nothing demonstrates so clearly what a people is made of than how it conducts its monetary policy' (Schumpeter 2014, p. XIV). To sum up, Schumpeter is close to Mauss' 'total social fact' when he says about money: 'The monetary system is exactly, as the other economic institutions, a wheel of the whole social process, and so, it both reports to economic theory and sociology, and finally 'applied research' in history, ethnology and statistics' (Schumpeter 2005, p. 49).

These are the pillars of what Schumpeter called 'monetary science', which corresponds to both a pluralist methodology and a state of mind for the researcher. According to

Schumpeter, 'monetary science' must focus on the significance of money's functions in the economic process (Schumpeter 2005, p. 51). Thus, such an approach recalls the three dimensions of the 'meanings of money' illustrated above, suggesting that Schumpeter's institutional approach to money is compatible with the French one, which focuses on the confidence and sovereignty issues of money.

The French Institutionalist Monetary Approach is represented by the work of Aglietta, Orléan and Théret (Aglietta and Orléan 2002, Théret 2008). Coming from different disciplines, these authors suggest a pluralistic approach to dealing with monetary issues, which is useful in terms of catching the main issue regarding money: confidence. The authors assert that confidence relies on three dimensions, as follows.

'Methodical confidence'. There exists a social conformism as a result of the use of money, meaning that 'I want what the others have'. This 'desired thing' is like a collective totem because straight away it has a societal dimension and is then external to the individuals. One is dealing here with the three main classical functions of money. From this, Aglietta (2015) says that the social link through money is the most important social sphere because it establishes the cohesion of societies:

Money is a social contract objectified in a common medium by which the community which makes use of it produces in each of its members in the act to pay what it judges to have received from him/her by him/her activity.

'Hierarchical confidence'. As Aglietta (2015) underlines, this means that in a heterodox approach money is not the consequence but the cause of the market in capitalism, in which the State plays a significant role. From this point of view, it recalls what was said previously about Schumpeter. Indeed, according to Aglietta, money can only exist through a system of payments regulated by rules. Money is in a complex relationship with the State, being simultaneously outside the State and within its system. From this point of view, the French Institutionalist Monetary Approach is close to Schumpeter's interpretation. Indeed, monetary creation is private thanks to entrepreneurship projects financed by bankers, but it is also a common good in which the State plays an important role. By its rules and its system of payment it allows private debt to circulate, creating unity and confidence in the system and, by its own debt, enhancing the circulation process in such a system. Aglietta agrees with Weber on this point: taxation and national debt enhance the functioning of a monetary zone. The hierarchy between several units of account in the latter values a unique currency for the payment of tax in a monetary space. In return, the national debt gives access to a national production that offers legitimacy to this unit of account while creating an intergenerational link.

More accurately, this means that the State, as well as the whole system, require articulation between monetary and fiscal policies. Monetary policies then have to be set up in Schumpeter's previous scheme in order to reflect the people's will; to do this, it must be able to use all the instruments necessary for the stability of the system. For this reason, it is extremely important for a central bank to have clear constitutional missions that embody the political will. The central bank depends on it to exist and is ready, if necessary, to buy national debt tied to fiscal imbalances in order to preserve the system. Therefore, 'people will never walk alone'. This addresses the Keynesian function of money, as quoted in the second part.

Finally, it is noteworthy that if the State allows money to circulate through the set-up of an efficient system of payment, it is not obligatorily tied to the emergence of money, as will be discussed in the following point.

'Ethical confidence'. This deals with the social norms and values that money embodies. Hence, such a dimension is especially important, given that it allows money to emerge and exist. From this point of view, money deals with identity, which has two aspects: it gathers and it distinguishes. In other words, money is tied to a community from both internal and external concerns. Such a dimension has more to do with sociology but is also tied to the previous ones.

To conclude, the two institutional approaches seem particularly relevant to an investigation of the monetary issues that are embedded in a societal framework. Hence, a pluralistic approach mixing economics and sociology appears necessary in order to understand these concerns. The Swiss case will be used next to demonstrate this.

4. The heuristic case of Switzerland

Switzerland is a country in which the 'money issue' is particularly relevant. Indeed, it has only recently become rich from a historical point of view (Studer 2008) and it seems that money has played a significant role in this regard. More accurately, money has been increasingly associated with both high value-added monetary and banking issues, as well as industrial activities. The hypothesis will also be formulated that, from a sociological perspective, money matters in Switzerland because it is a small open country, as well as being a multicultural country. In other words, the Swiss franc would be the key asset in the Swiss nation-state, uniting Swiss people beyond their differences while allowing the country to be prosperous and to exist internationally.

Nevertheless, the centrality of money in Switzerland has two facets: on the one hand, it allows national prosperity; and, on the other hand, the country faces strong monetary external constraints that sometimes place the Swiss National Bank (SNB) under pressure. In effect, Switzerland is a small open economy (45% of the national GDP comes from abroad), from which 15% of the Swiss GDP depends on banking and financial activities. Among other things, investors are attracted by the Swiss franc, which plays the role of an important diversification asset in the world, especially in Europe (UBS 2000), leading to significant amounts of capital inflow to the country. Such massive capital inflow, in comparison with the size of the country, induces a lower capital cost in Switzerland; this is a structurally competitive advantage called the 'Swiss interest rates bonus' (Kugler and Weder 2002). This bonus has played a key role in history in building a highly capitalistic industry entailing a highly competitive economy.

In return, an extremely competitive economy has emerged through the export sector, succeeding over time in gaining growing overseas market shares. This has led to a strong structural current account surplus that has been superior to 10% of the GDP for more than 20 years. Such a trend in the long run entails the appreciation of the Swiss franc, which must be taken into account by the central bank of Switzerland when it implements its monetary policy. Obviously, this external factor is normal for the central bank of a small open economy, but it can also represent a constraint.

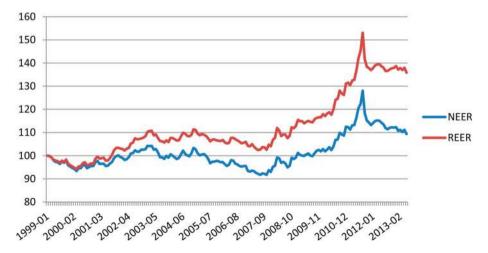
The same is true of the Swiss stance towards the EU. Although the country doesn't want full membership, Switzerland is strongly dependent on the EU from a commercial,

banking and financial perspective (Vallet 2012). In particular, the euro is the main invoicing currency in transactions between Switzerland and the EU, implying that the Swiss franc/euro exchange is central in the Swiss National Bank (SNB)'s monetary policy framework, as the 62% share in the Swiss franc effective nominal exchange rate illustrates (Fluri and Müller 2001). Even if Switzerland has succeeded in preserving its political independence towards the EU, while being strongly economically integrated, it has important, and sometimes negative, consequences.

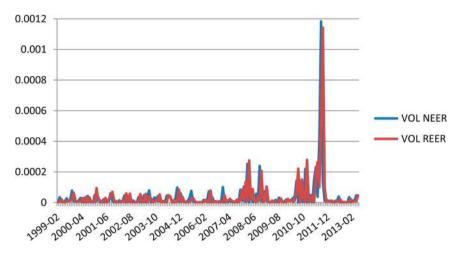
Hence, the fact that the Swiss franc is both a diversification currency for investors in Europe (a hypertrophy of the store of value function) and that it is not used for commercial transactions in Europe (a hypotrophy of the medium of exchange, as well as a unit of account money functions) renders the Swiss franc/euro exchange rate problematic for the SNB. As far as the first function of money is concerned, this is the case when the Swiss franc plays the role of a safe haven currency (Ranaldo and Söderlind 2010). Indeed, this happened during the recent crisis, leading to a strong and sudden appreciation of the Swiss franc: given the relative narrowness of Swiss franc denominated asset markets, a sharp increase in their demand induces appreciation of the Swiss franc. If the Swiss economy is able to resist such an exchange movement, it nevertheless depends on the crossed levels. The following Graphs 1–2 display such tensions within the crisis:

In summary, arguably there are apparent strong external monetary constraints in the implementation of monetary policy in Switzerland, although it is central in a monetary economy of production. Indeed, as Buiter (2008) argued in the case of the United Kingdom, Swiss monetary policies are often embedded in a trilemma: it is impossible to have simultaneously capital mobility, a strong financial specialization and the independence of monetary policy, as the following graph displays (Graph 3):

The recent crisis sustains efforts in that direction given the too-high appreciation against the euro; the SNB preferred to implement a peg to the euro instead of controlling capital inflow from September 2011 to January 2015 in order to stabilize the Swiss franc/



Graph 1. Swiss franc nominal effective (NEER) and real (REER) exchange rates. Source: SNB



Graph 2. NEER and REER volatility. Source: SNB; Author's calculations

euro nominal exchange rate. At first sight, it seems that the peg led to a partial abandonment of its independence.

Nevertheless, this evidence must be discussed from a sociological perspective. As stressed in the first and the second parts of this paper, money and the associated monetary policies must have a clear and strong tie with the people's political will. The directional and emotional meanings of money are particularly relevant here, as well as Schumpeter's quotation on the sociology of money. Hence, looking at the Swiss Constitution, such a tie appears. One can see to what extent money is important because the SNB's monetary policy must suit the needs of the Swiss people. For instance, the SNB 'implements a monetary policy that suits the general needs of the country; it is administrated with the help and under the surveillance of the Confederation' (Article 99, Paragraph 2). Furthermore, the SNB has 'to preserve the interests of the national economy and have to contribute, along with the private sector, to foster the prosperity as well as the economic security of the population' (Article 94, Paragraph 2).

What is interesting to consider is that, although the SNB is arguably one of the most independent central banks in the world (Bernanke *et al.* 1999), there exists a monetary governance in the sense that the SNB is accountable vis-à-vis the Federal Council, especially because the former interacts with the latter to implement its monetary policy. Therefore, as the Federal Council embodies the will of the Swiss people through the election of its political representatives, such a decision process reveals that money is at the core of the Swiss economy, as well as Swiss society, and then that it is a 'total social fact' for Swiss people.

These constitutional roots are particularly important because they are the social and political pillars of the country. They act as an internal anchor for a country that is subjected to both external and internal constraints, as quoted above. Indeed, the nation-state is limited in Switzerland. According to Rodrik's scheme (Rodrik 2011), Switzerland would be the country that has chosen hyperglobalization and democratic politics instead of a broader nation-state. More precisely, the limitation of the Swiss nation-state takes place on two levels, as follows.

'The bottom': the country functions with a federal structure that gives the main powers to 26 cantons, and then to citizens. Each canton has its own constitution and parliament, as well as government. As Tocqueville (1961) underlined, federalism brings power to the people, allowing them to increase their political participation. For this reason, in Switzerland federalism and direct democracy go hand-in-hand. Swiss inhabitants are Swiss because they are first anchored to a canton, not vice versa. From the perspective of Mann (1997), cited above, this means that Switzerland relies on solid local networks that become national through the existence of a redistributive framework between cantons, which eases the definition of the homogeneity of preferences.

'The top': as a result of its location, as well as geographical characteristics, historically Switzerland has had to bargain for agreements in order to secure external trade, although this represents the means to reaching prosperity. However, this has always been a doubleedged sword for the country: Switzerland has tried at the same time to limit the delegation of sovereignty, claiming its neutrality and its will of independence.

Although this doesn't mean that the nation-state does not exist at all in such a country, its structure and expression are limited by staying out of the areas of social life and economy that are considered private (Mann 1997). For this reason, Church and Head (2013) argue that it is not easy to find key factors and institutions that have been able to build unity, as well as the nation-state, in Switzerland: neither language, nor the army or religion have really played this role, or been able to build either unity or nation-state in Switzerland. Arguably, such a role has been played by the national currency, the Swiss franc. This has been the case through a material (wealth, prosperity), as well as symbolic, dimension (myth), giving birth to the three meanings of money quoted above. We can see clearly again in this case to what extent national currency and national production goes along with each other. The Swiss franc is the incarnation of modern Switzerland: as it is the result of the Swiss people's will (the meaning they have given to the national political project), money can be considered an institution giving sovereignty because it is a 'total social

However, this has taken time to emerge, given that money is similar to cards in a game of poker: what matters are not the cards, but what you do with them. In effect, when the country experienced independence in 1848, it didn't have a single, or even really its own, currency. If the Swiss franc was officially born in 1852, it was under the domination of the French franc in reality: more precisely, it was just France's monetary and financial 'appendix' inside the Latin Monetary Union, meaning that the sovereignty of money did not exist (Laurent and Vallet 2014). Furthermore, there used to be many local currencies that competed with the Swiss franc within the country (Weber 1988) leading, de facto, to the denationalization of money (Hayek 1976).

A significant change came about with the creation of the Swiss National Bank (SNB) in 1907. Its status clearly indicated that it controlled the printing presses in Switzerland from this point on, in order to suit the needs of the Swiss people. Then the monetary policy had to be implemented in order to foster the economy and to ensure that people lived better as a result of prosperity. It is particularly relevant to note that in such a federal country, one of the rare institutions that uses the term 'national' is the central bank, showing to what extent the Swiss franc lies at the core of national sovereignty and the sovereignty of money.

To be clear, the SNB's decisions follow several channels in the pursuit of reaching such sovereignties. First, the SNB's actions participated in the institutionalized state of money,

through the definition of the official unit of account and the establishment of a unified monetary area, along with the Swiss State. 'Hierarchical confidence', as well as the Schumpeterian monetary framework quoted above, comes into play here. As far as the latter is concerned, it is important to recall what Schumpeter (2005) used to say about this particular function of money. As the unit of account is the measure of value, it is 'the measure of life' for society. Indeed, it attributes quantitative grandeurs to subjective appreciations. In this way, money is central because it creates economic and social linkages between all the objects of appreciation and the behaviour of all the individuals. Money then assumes the same significance as language or writing through such a function, which becomes the most important one.

Schumpeter thereby distinguishes this function from the medium of exchange function, which is particularly instructive in the Swiss case. The unit of account function can exist independently because another type of money can be used in trade. Schumpeter uses the example of beef in primitive society, which was used to count wealth, as it was considered to be of the greatest value to certain tribes. However, for this reason, people preferred using a different type of money to exchange. Thus, the Austrian economist used to consider that money has a 'magical' and 'mystical' dimension that is embodied in social habits. The unit of account function goes along with the store of value function because the latter represents the sacrifice that someone is ready to make in order to separate from this money.

In Schumpeter's view (Schumpeter 2005), recalling Simmel's sociology of money (Simmel 2004), and of course the 'methodical confidence' that was defined previously, everyone has the desire to possess things and wants to have what another person has. Money has to be desired, and in a modern economy, it is the mission of the central bank to preserve its purchasing power through the control of prices and the fostering of growth. Once again, a currency doesn't become an important unit of account or a store of value because it is used widely in trade (economic explanation). It becomes so because people have strong confidence in it (sociological explanation).

As a consequence, in Switzerland, although several foreign currencies circulate within the country, it is only to facilitate trade and growth according to Switzerland's specialization. The unique and official unity of account within the country is certainly the Swiss franc, which sits at the highest level of the hierarchy of monies without any credible challengers. Furthermore, the Swiss franc is important for Swiss people because it deals with 'Swissness' and because Swiss people trust in Swiss institutions that hold money. The three meanings of money are gathered here as well as money as a 'total social fact'.

Second, independence did not prevent the main Swiss economic actors from collaborating in the national interest. Employers, labour unions, farmers, the government and the SNB worked to be able to define the best monetary framework in order to reinforce both its independence from abroad and its internal unity (Jordan 2014). Here is found the monetary governance that was quoted previously, and then again the 'methodical confidence'. Third, such monetary policies, even if they were clearly orthodox, did not question sovereignty. Indeed, Switzerland also established fiscal sovereignty, implying fiscal transfers between cantons. Furthermore, the central bank was intent on acting as a lender of last resort towards both fiscal and banking problems (bail-in).

To illustrate this, we can use two examples that are particularly relevant to this issue. The first refers to the period following the creation of the SNB. Thanks to Swiss neutrality

and stability during WWI, Switzerland increasingly became a major banking and financial location within Europe. Hence, with the support of the main economic sectors, the SNB implemented orthodox monetary policies in order to attract capital inflows to maintain a low capital cost, and then to build a high value-added specialization. Furthermore, the political decision in 1934 to set up a better juridical environment for investors, by means of a law protecting banking secrecy, sustained efforts in that direction: it gave a signal to Swiss domestic, as well as international, investors that they could invest in Switzerland because their capital would be warranted in total discretion. In the same period, the SNB decided to help, as a lender of last resort, an important banking institution (the so-called 'Banque Populaire Suisse') during a severe crisis that affected Switzerland in 1933.

Here is found one of the positive effects of size, in the conditions where there exists a strong politico-economic project: as a result of scarce resources, small nation-states have to find other ways to compensate (Schiff 2014). In the Swiss case, it was the attractiveness of the economy through capital inflow, inducing high amounts of investment in human capital to build a highly skilled economy capable of working with highly capitalistic production. Hence, more than just support from the main economic sectors to achieve such a strategy, it was a national coalition (Eichengreen and Temin 2000), implying representatives of all the people.

During the 1930s, in spite of the high costs of the Gold Standard regime in Switzerland (Bordo and James 2007), such a coalition took place to build a strong currency. The latter allowed both banking and financial activities, as well as a strong industry, to exist, and was useful for a multicultural country seeking to create unity thanks to the prosperity induced (Vallet 2014). As the political leader Musy summed up in the 1930s:

One has said with reason that our Swiss franc is the main column on which our national political building is based. We have to preserve it [...]. With such an economic structure as ours, one can consider the money as the single big financial enterprise from which all the Swiss people, whatever the economic groups they belong to, are interested in (Musy 1933, p. 571).

'Methodical and ethical confidence' take place here, and above all, the 'total social fact' status of money.

The second example deals with the recent crisis. The SNB has not hesitated to implement strong limitations of monetary sovereignty in the short term to maintain the existence of the Swiss franc in the long term. Indeed, the SNB was certainly one of the central banks to react most quickly to the crisis and then to avoid depression and deflation, through conventional, as well as non-conventional, monetary policies. Above all, however, it decided to set up a kind of official peg to the euro from September 2011 to January 2015: because of the tightening of monetary conditions in Switzerland, through the appreciation of the exchange rate towards the euro, the SNB chose to reduce its monetary margins because of the peg instead of undergoing instability. On the one hand, this can be seen as a radical measure because, in the Swiss case, as a result of the nature of exchange rate fluctuations, anchoring reduces domestic monetary autonomy from a 'technical point of view' (Guillaumin and Vallet 2012). From this perspective, the peg corresponds to a loss of monetary sovereignty.

On the other hand, however, the peg brought strong advantages to Switzerland. First, in the short term, such a policy entailed quick positive effects, which were the stabilization of the exchange rate, as well as the reflation of the Swiss economy. Hence, it allowed the SNB to fulfil its mission for the Swiss people, which is to reach prosperity. Second, in the medium term, the SNB did not hesitate to implement complementary measures to maximize the positive effects and symmetrically to prevent negative effects from appearing. For instance, it helped, as a lender of last resort, too-big-to-fail banking institutions such as UBS. In the same way, it decided, with the government, to set up certain rules for banks to prevent them from supplying bad credit to the real estate sector and thus to avoid instability (SNB 2013); it has also gained more power to supervise financial activities (Federal Council 2011).

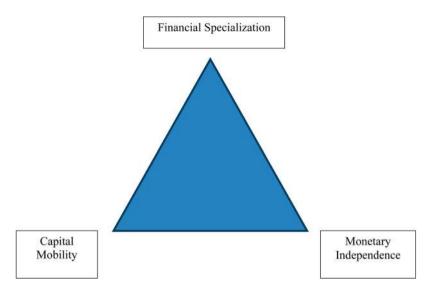
In the long term, the last advantage (but not the least) is that the peg allowed the Swiss franc to exist. Indeed, if the SNB had not reacted, perhaps Switzerland would have had to consider asking for full EU membership in the long term. In conclusion, in the long term the peg enhanced the monetary efficiency of the SNB, thanks to an improved forward-guidance framework. Thus, arguably, the existence of Switzerland as a nation-state depends heavily on two conditions linked to monetary issues, as follows:

- (1) Its capacity to access large external markets and, more widely, to deal with neighbouring states. This factor contributes to the economic diversity and prosperity of the country. Hence, the SNB has to take this factor into account when implementing its monetary policy.
- (2) Its capacity to preserve the Swiss franc as a specific asset, in the vein of our three 'meanings of money'. This deals with an internal dimension of monetary policy. From a sociological perspective, for this reason the Swiss franc arguably plays the role of 'national anchor' in the 'total social fact' framework developed here as the SNB's current governor recently recalled: 'I strongly believe that price stability is an essential condition for the growth of our economy, and therefore more than a contribution to our prosperity. Because it also has a social dimension and is one of the elements of cohesion in our modern society' (Jordan 2014, p. 5). Schumpeter's monetary policy vision, as quoted above, is clearly also relevant here.

Nevertheless, such a framework tackles important issues, and perhaps also paradoxes:

- To what extent is the Swiss franc able to exist for Switzerland's internal needs while such a currency is not used outside the country in the international markets? In other words, as the Swiss franc is the currency of a small nation-state that strongly depends on external markets, its existence is called into question.
- To what extent is the Swiss franc exposed to turbulence in the external markets, thus leading to internal turmoil that could threaten the national economy and cohesion? In effect, Switzerland's openness leads to its monetary 'vassalization' because a large market is likely to impose its currency on others. Even if the existence of the Swiss franc were preserved, its parities would be likely to be erratic, affecting the economy with the exchange rate pass-through.

Once again, such issues refer to the Swiss monetary, and then, economic, social and political framework that determines its size. If Switzerland exists economically thanks to its neighbours, it must rely on exports, which can be foreign-currency, or Swiss-franc,



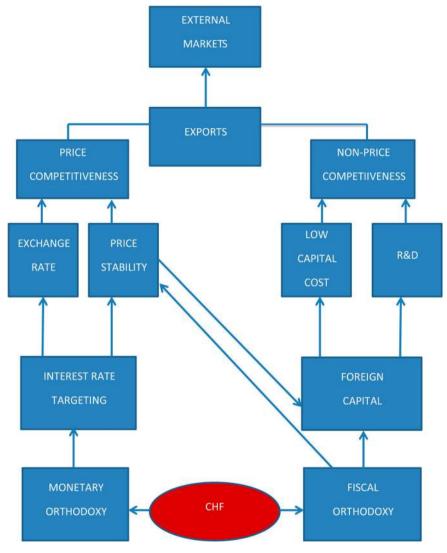
Graph 3. Buiter's trilemma applied to Switzerland. Source: Buiter (2008)

denominated. Generally speaking, it is the first scenario because the Swiss franc is not a currency of payment, and because Switzerland has to use mainly dollars and euros, the currencies of its key partners. Hence, as exports are likely to be subject to exchange rate fluctuations, ceteris paribus, economic actors must be specialized in sectors which are less sensitive to exchange rate movements.

Furthermore, in the Swiss case, this justifies the orthodox monetary policies that aim, in the first instance, to achieve price stability in order to avoid interest rate - as well as exchange rate - volatility. Bibow (2013) stresses the importance of such a connection between external and internal policies in an open economy: price stability improves external competitiveness through the preservation and depreciation of the real exchange rate (assuming that there is little or no nominal appreciation), which fosters exports. To reach price stability, it is necessary to pay attention to the workers/patrons' wage bargaining, as well as the public deficit in an orthodox framework. If we have called to mind the existence of the first one in Switzerland, the second takes place through the limited role of the State in the economy.

If the Swiss State strongly helped the Swiss franc framework to emerge (Jordan 2014), in particular through the role of taxation and national debt, which are essential to asserting its power and then supporting transferable private debt through the banking system (Weber 1981), it became limited over time. For instance, besides the institutionalization of fiscal orthodoxy in the 1930s to win the 'battle for the Franc' (Vallet 2014), the implementation of a 'fiscal golden rule' in 2003 sustains efforts in that direction because it prevents Switzerland's national debt from growing too rapidly. Such a constitutional law has simply ratified what it historically used to be, de facto.

In return, a low deficit induces a weak public debt. As a result of Switzerland's characteristics, scarce Swiss bonds have become extremely attractive because they are perceived as sure assets for international investors. Obviously, as Bibow (2013) highlights for Germany, this framework can only work if foreign partners don't follow the same way,



Graph 4. The Swiss franc as the core of the Swiss prosperity. Source: Author

meaning they implement active economic policies. But especially in the non-cooperative European regional integration framework, such a process increases the attractiveness of the Swiss economy, as well as the foreign direct investment inflow. The following Graph 4 illustrates this:

It is also worth noting that circulation of the Swiss franc overseas is relatively limited, partly because its use abroad is discouraged by the Swiss authorities (Dodd 1995): even though the internationalization of Swiss banks participates in spreading the use of the Swiss franc – indicating that the internationalization of a currency also relies on banks (Rochon and Vernengo 2003) – the main relevant external market to buy and sell Swiss francs is located only in London. As Cohen (1998) points out, such a scarcity means that investors don't have to worry about the possibility of future devaluation, which

could be harmful for their Swiss-franc denominated assets, and that there are limited restrictions on the usability of their holdings. This increases their confidence in Switzerland's currency. And once again, we find here the relationship between national currency and national production, especially in this case because 'no national money [...] is [...] a means of final payment at the international level' (Rossi 2008, p 107).

Hence, our two previous issues/paradoxes are solved here: the Swiss national currency can exist and give positive effects in spite of the small size of the economy, because there is an international demand for this asset. If all the functions of money are not concerned, given that the store of value is overrepresented and even hypertrophied in the Swiss case, this situation offers strong advantages to the country. Through the store of value function, the internationalization of the currency is sufficient both to create conditions for attractiveness and to preserve the monetary policy from being driven too much by external forces. Furthermore, the strong advantage for Switzerland is that such a demand is limited, also inducing a limited deterritorialization of the money (physical, as well as functional). Switzerland is then able both to enter external markets and to exist as a small nation-state.

In other words, the Swiss franc is accepted thanks to both persuasion and coercion, referring to the three forms of confidence quoted above: its use is apt to be perpetuated simply by regular repetition of previous practice, which is particularly important because of Switzerland's specialization, as Orléan (1989, pp. 81-3) recalls: 'Imitation leads to the emergence of a convention wherein emphasis is placed on a certain 'conformism' or even hermeticism in financial circles.' Such a framework exists thanks to strong national institutions having a democratic basis, which relies on social norms and values.

Hence, from our analysis, money is the backbone of the country, allowing it to exist in the globalization process while respecting the political will of the citizens. If Switzerland's stance, as well as the Swiss franc's international status, put pressure on the Swiss nationstate - particularly because the country is strongly market-driven - the latter has succeeded in defining a new way to exist over time. Despite growing international currency competition, as well as the internal use of currencies other than the Swiss franc, the latter still exists to fit the interests of Swiss citizens. To sum up, the status of the Swiss franc in Cohen's Currency Pyramid (Cohen 1998, p. 113) sustains efforts in that direction: the Swiss franc is an 'Elite Currency'. It is sufficiently insulated to exercise a fair degree of monetary sovereignty while being under the influence of regional and even global counterparts. This is the price that must be paid, but it is not too high a price for such a small nation-state to exist.

5. Concluding remarks

This paper has sought to argue to what extent it could be both interesting and relevant to borrow from economics and sociology (and also other social sciences) to investigate monetary issues within a heterodox framework. Indeed, in order to exit from the doxa of money neutrality in economics, it is particularly important to explain to what extent money is embedded in historic, as well as social, life embodying clearly Mauss' key concept of 'total social fact'. Hence, we are able to comprehend the way in which monetary policies are set up and to tie money to a people in a country or monetary zone. Hence, it is shown that 'money matters', which has hopefully been demonstrated through the Swiss case,

thanks to an institutionalist approach, mixing the perspectives of Schumpeter and some French economists.

Beyond the Swiss case, it is important to determine the relevance of such a pluralistic approach. It is not desired to convince economists to change their mind in this way, but rather to say to them that they can and sometimes have to. In effect, with economics and sociology, there are two 'sisters [of] social sciences'. There is no difference in nature as far as their object is concerned; it is the same but seen through different glasses. Hence, depending on the researchers' issues, as well as their methodology, they can use concepts from both disciplines. Moreover, depending on their skills, they will chose the one best way to mix the two disciplines, and then they will hierarchize them: it could be political economy, socioeconomics or economic sociology. In this way, sociology has a special status in terms of economics: disciplinary, methodological or 'practical'.

To conclude, the visions of Baudelot and Mairesse (2005) are considered to be right: economics and sociology are like two border countries that have their own culture and specificities, with a visible border. This must remain; however, this does not prevent the two disciplines from collaborating, cooperating and confronting in order to create new concepts, 'upstream', and to improve the scientific demonstration and specification, 'downstream', of research. This is science, whatever the disciplines. In this way, the scientist participates in changing old economic ideas, what could be difficult but necessary:

to arrive at the borders of the discipline, and cross into the domain of other social sciences, is actually quite consistent with the current evolution of economics, and thus with the paradigm as it is currently evolving. [...] However, in the process of this expansion, economics is bound to adapt to these new terrains, as new facts often stimulate new methods and theories (Piore 2006, p. 22).

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References

Aglietta, M., 2015. La monnaie, la valeur et la règle, interviewed by P. Ould Ahmed and J.-F. Ponsot, Revue de la régulation. Available from: http://regulation.revues.org/10998.

Aglietta, M. and Orléan, A., 2002. La monnaie entre violence et confiance. Paris: OdileJacob.

Baudelot, C. and Mairesse, J., 2005. Economie et Sociologie. D'une confrontation à l'autre, ou vingt ans après. Revue économique, 56, 489-496.

Bernanke, B., et al., 1999. Inflation targeting. Lessons from the international experience. Princeton: Princeton University Press.



Bibow, J., 2013. Lost at sea: the euro needs a euro treasury. LSE financial markets group special paper series, 227, November.

Bordo, M. and James, H., 2007. De 1907 à 1946: enfance heureuse ou adolescence difficile?. Banque nationale suisse 1907–2007, Banque nationale suisse, Zürich.

Buiter, W.H., 2008. Why the United Kingdom should join the Eurozone. International finance, 11 (3), 269-282.

Carruthers, B.G. and Babb, S., 1996. The color of money and the nature of value: greenbacks and gold in postbellum America. American journal of sociology, 101 (6), 1556–1591.

Church, C. and Head, R., 2013. A concise history of Switzerland. Cambridge: Cambridge University Press.

Cohen, B., 1998. The geography of money. Ithaca: Cornell University Press.

Davidson, P., 1972. Money and the real world. The economic journal, 82 (325), 101-115.

Dodd, N., 1995. Money and the Nation-State: contested boundaries of monetary sovereignty in geopolitics. International sociology, 10 (2), 139-154.

Edgar, A. and Sedgwick, P.R., 2008. Cultural anthropology. In: A. Edgar and P.R. Sedgwick, eds. Cultural theory. The key concepts. New York: Routledge, 76–78 [Orig. Pub. 1999].

Eichengreen, B. and Temin, P., 2000. The gold standard and the great depression. Contemporary European history, 9 (2), 183-207.

Federal Council, 2011. Rapport Objectifs du Conseil federal, Berne, 9 novembre.

Fluri, R. and Müller, R., 2001. La révision des indices du cours du franc suisse, nominaux et réels, pondérés par les exportations, Bulletin trimestriel, 3, Banque Nationale Suisse, Zürich.

Guillaumin, C. and Vallet, G., 2012. La Suisse et la zone euro: votre monnaie, notre problème? La possibilité d'un ancrage de jure. Revue d'Economie Politique, 122 (5), 629-655.

Harrod, R.F., 1969. Money. London: St. Martin's Press.

Hayek, F.A., 1976. Denationalization of money. The argument refined. London: The Institute of Economic Affairs.

Ingham, G., 1996. Money is a social relation. Review of social economy, 54 (4), 507-529.

Ingham, G., 2003. Schumpeter and weber on the institutions of capitalism. Solving Swedberg's puzzle. Journal of classical sociology, 3 (3), 297–309.

Jordan, T.J., 2014. Une monnaie de qualité, pilier fondamental de notre société. Discours à la journée d'Ulster, 11 pp.

Keen, S., 2014. Endogenous money and effective demand. Review of keynesian economics, 2 (3), 271-291.

Kugler, P. and Weder, B., 2002. The puzzle of the Swiss interest Rate Island: stylised facts and a new interpretation. HWWA Discussion Paper, 168, 20 pp.

Kydland, F.E. and Prescott, E.C., 1977. Rules rather than discretion: the inconsistency of optimal plans. Journal of political economy, 85 (3), 473-491.

Laurent, A. and Vallet, G., 2014. La construction progressive de l'avantage compétitif financier suisse (1914–1936). Revue d'Economie Financière, 113, 259–273.

Le Héron, E., 2013. A quoi sert la Banque Centrale Européenne? Paris: La Documentation française. Mann, M., 1997. Has globalization ended the rise and rise of the nation-state? Review in international political economy, 4 (3), 472–496.

Mauss, M., 1966. The gift, forms and functions of exchange in archaic societies. London: Cohen & West.

Minsky, H.P., 1992. Schumpeter and finance. In: S. Biasco, A. Roncaglia, and M. Salvati, eds. Market and institutions in economic development: essays in honour of Paulo Sylos Labin. London, England: MacMillan, 103–115.

Monvoisin, V., 2013. What's the use of banks, especially after the crisis? Review of keynesian economics, 1 (2), 195-209.

Musy, J.-M., 1933. Déclaration au Conseil Fédéral. Conseil fédéral, 26 septembre.

Orléan, A., 1989. Mimetic contagion and speculative bubbles. *Theory and decision*, 27 (1–2), 63–92.

Orléan, A., 2008. La sociologie économique de la monnaie. In: P. Steiner and F. Vatin, eds. Traité de sociologie économique. Paris: PUF, 1-32.

Piore, M.J., 2006. Qualitative research: does it fit in economics? *European management review*, 3, 17–23.

Ranaldo, A. and Söderlind, P., 2010. Safe haven currencies. Review of finance, 14 (3), 385-407.

Rochon, L.P., 1999. Credit money and production: an alternative post-Keynesian approach. Cheltenham and Northampton: Edward Elgar Publishing.

Rochon, L.P., 2000. The role of credit and commercial banks in the creation of money. In R. Baiman, R. Boushey, and D. Saunders, eds. *Political economy and contemporary capitlism*. Armonk: M.E. Sharpe, 139–148.

Rochon, L.P. and Rossi, S., 2013. Endogenous money: the evolutionary versus revolutionary views. *Review of keynesian economics*, 1 (2), 210–229.

Rochon, L.P. and Vernengo, M., 2003. State money and the real world: or chartalism and its discontents. *Journal of postkeynesian economics*, 26 (1), 57–67.

Rodrik, D., 2011. *The globalization paradox: democracy and the future of world economy.* New York: W.W. Norton & Company.

Rossi, S., 2008. Macroéconomie monétaire. Genève: Schulthess Médias Juridiques SA.

Schiff, M., 2014. Small states, micro states, and their international negotiation and migration. *Journal of economic integration*, 29 (3), 430–449.

Schumpeter, J.A., 1917. Money and the social product. *International economic papers*, 6, 148–211. Schumpeter, J.A., 1961. *The theory of economic development*. Cambridge, MA: Harvard University Press [Orig. Pub. 1934].

Schumpeter, J.A., 1939. Business cycles. New York, NY: McGraw-Hill Book Company, Inc.

Schumpeter, J.A., 2005. Théorie de la monnaie et de la banque. I. L'essence de la monnaie. Paris: L'Harmattan.

Schumpeter, J.A., 2014. Treatise on money. Aalten: Wordbridge Publishing.

Simiand, F., 1934. La monnaie, réalité sociale. Annales sociologiques, 1, 1-58.

Simmel, G., 2004. The philosophy of money. London: Routledge [Orig. Pub. 1907].

Steiner, P. and Gislain, J.J., 1995. La sociologie économique: 1890-1920. Paris: PUF.

Studer, R., 2008. When did the Swiss get so rich? Comparing living standards in Switzerland and Europe, 1800–1913. *Journal of European economic history*, 37 (2), 405–451.

Swiss National Bank (SNB), 2013. Quarterly bulletin, December.

Théret, B., 2008. La monnaie dévoilée par ses crises. Paris: Éditions de l'EHESS.

Tocqueville, A., 1961. *De la démocratie en Amérique*. Tome 2, Paris: Gallimard [Orig. Pub. 1840]. UBS, 2000. The future of the Swiss franc. Independence or clinging to the euro boat? *UBS group economic research studies*, October.

Ülgen, F., 2014. Schumpeterian economic development and financial innovations: a conflicting evolution. *Journal of institutional economics*, 10, 257–277.

Vallet, G., 2012. Should i stay or should i go? Switzerland and the European economic and monetary integration process. *Journal of economic integration*, 27 (3), 366–385.

Vallet, G., 2014. It is worth its weight in gold: the Swiss franc in the 1930's. *Research in applied economics*, 6 (1), 128–146.

Weber, M., 1981. *General economic history*. New Brunswick, NJ: Transaction [Orig. pub. 1927]. Weber, E.J., 1988. Currency competition in Switzerland, 1826–1850. *Kyklos*, 41, 459–478.