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The Tobin Tax and the Regulation of Capital Movements.

Suzanne de Brunhoff and Bruno Jetin

1. The Tobin Tax in a Context of Financial Crisis

The instability of the international monetary and financial systems during the 1997-"98 financial crisis was a cause for great concern. Neo-liberal (free market) economists and Western governments were perplexed by the chain of events. The International Monetary Fund (IMF) was severely criticised for the way in which it intervened in those "emerging"¹ countries which had asked for its help – its analyses were often erroneous, and, in the end, it was incapable of lessening the extent, length, or contagiousness of the crisis. This impotence was noted, and as a result, above and beyond the usual wishful thinking and calls for a reduction in international instability, a few systemic reforms were mooted.

Amongst these proposals, a place of honour should be given to an idea which J. Tobin had first developed during the 1970's – that of a tax on foreign exchange transactions. When Tobin first came up with this line of thought, the dollar was in a state of crisis, and had been in a precarious state both since the end of the 1960's, and, in fact, since the collapse of the Bretton Woods system (dating back to 1944). Tobin's objective was to "throw some sand on the fire of [currency] speculation", in an effort to reduce exchange rate volatility. In and of themselves, these ideas were nothing revolutionary – but, for several reasons, they have taken on a great importance.

Critically, Tobin's ideas involve the major capitalist currencies: the dollar, the euro (as the successor to the D-Mark), the yen, all of which are linked in a floating rate system. These currencies are at the core of the international foreign exchange market, which is itself a cornerstone of the international capital markets. Hence, a reduction in exchange rate volatility is first and foremost of interest to the industrialised capitalist states and regions which issue dollars, euros, and yens. Unlike local measures such as the foreign exchange controls which "emerging" nations can impose, the Tobin tax has a universal calling – as such, it has a non-hierarchical character.

¹ The "emerging" nations, in today's economic and financial literature, are those newly capitalist countries which are participating in the international financial markets. For the last few years, the Economist has been giving a list of these nations, including Portugal (even though it is part of Western Europe), Russia, and the Czech Republic. South Korea and Mexico are also included, even though they are already members of the OECD.

The adoption of the Tobin tax would be an important political act, a break both with the neo-liberal practices which accompany economic globalisation, and with the fatalism which goes along with them. This idea assumes that the level of co-operation which exists between the nations of the world goes well beyond the narrow framework of G3 or G7 summit meetings. The Tobin tax implies that all governments would have to act within their own financial sphere so as to help control the short-term movement of capital. This would ease the pressure on emerging countries, whose own currencies depend on the major currencies. Moreover, there would also be an easing in the level of commercial and financial competition between the industrialised capitalist countries, as such conflicts often include disagreements over current exchange rates.

In general, most governments have adopted a policy of benign neglect towards the exchange rates of the major currencies, abdicating most of their decision-making capacity to the market, and above all, to the American government (inasmuch the dollar is at the peak in the hierarchy of world currencies). However, since 1985, this laissez-faire attitude has been increasingly accompanied by a crisis situation, ie in Japan, a country which has been periodically forced to sell or buy dollars on a massive scale so as to support or weaken the yen. In addition, the Bundesbank's discount rate policy has been increasingly independent from that of the Federal Reserve – an example having been the decisions it made in 1987. The advent of the Euro in 1999, replacing as it will the D-Mark in its role as a key currency, cannot help but increase the tensions which are born out of the current rivalry between the world's major currencies.

Promoting the Tobin tax would lead to greater stability, as it would increase the level of co-operation between those powerful countries or regions which issue the world's major currencies. Taxing foreign exchange trading to reduce the role of speculators would also be a clear political warning to the various actors on the world's economic stage. The deregulations and restructurings which have been at work since the 1970's have contributed everywhere to an imbalance of power, abetting capitalist forces to the detriment of the forces of labour. Be it in salaries, jobs, social benefits, or taxation, the pressure on employees has been rising continually, in an attempt to achieve the increase in company profits which shareholders have been demanding. This pressure has been presented as if it were inevitable, an unstoppable force which everyone must accept, or else disappear. Taxing currency speculation would have an important symbolic impact, as it would create a breach in this wall of fatalism which is so detrimental to the forces of labour.

We shall be undertaking a further analysis of the Tobin tax, and rebutting the usual criticisms of this idea by certain so-called experts. First, however, it would be useful to recount briefly a few other reforms which have been proposed in recent times. Some of these don't mention the Tobin tax and others reject it explicitly. We are not claiming that the Tobin tax is a panacea. It doesn't involve any reform of the international monetary system, nor a tax on all financial trading. On these questions, and on many others, necessity, political will, and public opinion will lead the way to new avenues for discussion and action. Still, the Tobin tax implies greater control over short-term capital movements, and as this can serve to reduce the instability of the international monetary and financial systems, it is a necessary measure – albeit an incomplete one. The currency markets cannot be stabilised unless the financial speculators who destabilise it are

confronted politically.

A few of the reforms which have been proposed purport to improve the management of public and private financial institutions: increased transparency in dealings by banks and by the FMI; supervision of banks' balance sheets to bring them into line with their Cooke ratios²; and other measures of this ilk. Everyone agrees with these steps – but they have brought about few real changes.

Other proposals have been more innovative. There is the example of the neo-liberal J. Sachs, who envisages the creation of an international organisation other than the IMF. This new institution would be expected to issue liquidities to help any country which is affected by a sudden financial panic such as those which devastated Asian currencies in 1997. Its role on the international stage would be similar to the one assumed by the US Federal Bank when it bailed out Wall Street in October 1997: an unconditional loan of liquidities to stem the crash. One objection to this idea involves the issue of which currency would be used in these interventions, given that there is no officially acknowledged international money of reference.

Several economists have criticised the IMF, which was acting in accordance with its neo-liberal orientations, for having pressured “emerging” countries into opening up a “capital account”. Some consider this to be premature – others deem the very principle to be questionable, in that the countries involved become exposed to an inflow and outflow of foreign capital over which they have no control. On this point, it is indispensable to reform the methods which the IMF uses to lend funds.

There have been many declarations in favour of a reform of the IMF, including one which was made in an official French document³ that discussed the issue of international financial stability. This paper envisaged the establishment of a new “Bretton Woods”, that is, of a new agreement covering international monetary co-operation. It did not advocate the adoption of a new exchange rate system, nor did it seek a shakeup of the current international hierarchy which is based on the domination of a few key currencies. Rather, the statement described how the IMF, which itself had been born out of the 1944 Bretton Woods agreements, could be changed; and it called for the creation of a “veritable governmental policy for the IMF, to be achieved through a transformation of the Council's current interim Committee.” The current interim Committee has 24 members, all of whom are at least finance ministers or central bank governors. It meets twice per year so as to study the IMF's main orientations. The industrialised capitalist nations dominate its proceedings.

The type of reform which the French paper proposes does not constitute any real break

² This denotes a proposal made in 1988 by the Cooke Committee to the Bank of International Settlements (BIS). It is an attempt to determine the optimum ratio between a bank's capital and its assets. The goal is to reduce systemic credit risks.

³ An annex to the 1999 French law bill, entitled “Towards a new architecture for the global monetary and financial systems”

with the current situation, involving, as it does, the domination of the global monetary system by the major capitalist powers. In fact, the document does not even indicate the areas in which the new FMI would intervene; it simply repeats the habitual exhortations for a wider and more transparent dissemination of information, as well as for the implementation of measures leading to greater co-operation between the public and the private sectors - but only once a financial crisis has actually broken out.

The validity of these official French proposals is particularly compromised by the fact that the Tobin tax had been explicitly rejected in a preceding policy paper, which had not even seen fit to replace this measure by any real analysis, involving either the wealthy or the “emerging” nations, of the need to supervise short term capital movements. It is true that French and German finance ministers have been calling out since December 1998 for lesser volatility in the Euro-USD exchange rate through the creation of a band of tolerance, beyond which monetary authorities would intervene. The Japanese government was in fact also very interested by this proposal, for it too has been seeking to create a veritable yen zone - despite the opposition of the United States. In any event, if our hypothesis is correct, that is, if it is truly politically necessary to restrict the free circulation of capital before one can implement a reform which effectively lessens monetary and financial instability, a stopgap measure of the type included in this French proposal does not comprise a credible alternative to the Tobin tax.

2. The Objective, Usefulness, and Limitations of the Tobin Tax

Exchange rates are subject to the double influence of the productive and the financial economies. It is difficult to assess the weighting of each of these spheres with respect to the other; nor can one readily identify the way in which the productive economy affects the financial economy, or vice versa - especially since the advent of the process of globalisation has complexified all these interactions. As a result, economists are forever debating these issues⁴. Nevertheless, most people acknowledge that financial activity can sometimes provoke excessive currency volatility, fluctuations which have no direct or immediate connection with the realities of the productive economy.

According to its author⁵, the aim of the Tobin tax is to fight against excessive exchange rate volatility. In the current floating rate system, prices move all the time. Now, it is true that minor fluctuations in a rate of exchange do not, as such, pose any major problems to companies. On the other hand, if there is a discontinuous jump in an exchange rate, and if the magnitude of its move is great⁶, companies may have to postpone or even cancel

⁴ On this topic, see F. Chesnais (1994), the volume edited by F. Chesnais in (1996 - especially S. de Brunhoff's contribution), and the 1997 “Proclamation of Economists Against Unitary Thinking”.

⁵ See J. Tobin's interview with *Le Monde*, 17 November 1998.

⁶ The term “volatility” will be henceforth used to designate the excessive fluctuation of the rates of foreign exchange.

their investment programmes. For instance, building a factory, or exporting, are decisions which require a certain long-term commitment; it is difficult to resell or close a factory without damaging a company's profits - and managers who are under pressure to satisfy their shareholders' ever-increasing demands are loathe to suffer losses of this type⁷. When seen in this perspective, exchange rate volatility engenders the spectre of reduced profitability, thereby causing a drop in productive investment, and thus lower economic growth. In addition, it can cause governments to formulate economic policies which are more concerned with the way in which the financial markets are going to react than with the issues of growth and full employment. At the same time, some governments, particularly in Europe, have decided to grant independence to their central banks, institutions which are so obsessed by their fear of inflation that they fail to notice the threat of deflation, and therefore, in the name of protecting their currency on the domestic and external fronts, refuse to lower interest rates⁸.

It is estimated that 80% of all transactions on the currency markets will be unravelled nowadays within a week or less. Day traders have a decision-making horizon of a few hours. In such an environment, the Tobin tax would have an immediate impact, as it would reduce the profits which speculators, whose trading horizon is one day or one week, are hoping to make out of the currency markets; yet it would not penalise the long-term financial transactions which are a necessary attribute of international trade and overseas productive investment.

The Tobin tax would achieve its purpose through an extremely simple "filtering" of currency trading. Let's assume that a trader wants to convert francs into dollars. He or she would have to pay, for instance, a tax of 0.1% on this deal. If the trader were to later convert the dollars back into francs, the same tax of 0.1% would again have to be paid. If such "in and out" trades were undertaken once a day, at the end of the year, the trader would have paid up to 48% of the trade's face value in taxes; if such a trade occurred on a weekly basis, the annualised tax receipt would be 10%; and if it were to occur once a month, the figure is 2.4% (J. Tobin, 1996, p. xi).

Thanks to this "filtering", the tax would reinforce the influence exerted by long term

⁷ Such is the attitude of the CBI in Great Britain, which has expressed its wish that the UK quickly adopt the Euro so that British companies are not placed in a position of competitive disadvantage in case the Pound strengthens. Japanese companies, like Toyota and Nissan, who have used their British factories as a platform from which they export to the rest of Europe, have publicly threatened to postpone their investment programmes and to reconsider their presence in the UK if the English government does not declare its support for a rapid entry into the Euro zone.

⁸ The "franc fort" (strong franc) policy which France followed throughout the 1980's is an example of this attitude. The policy was supposed to restore the competitiveness of French business, and then lead to a drop in joblessness. It was successful on the first point - but not yet on the second. Will the "strong franc" mutate into a "strong Euro"?

exchange rate expectations, those which guide companies' investment decisions, to the detriment of short-term expectations, which only reflect speculative profit strategies.

Three Additional Benefits of the Tobin Tax.

First, national monetary policies would regain a part of the autonomy which they have lost in the current situation. The tax would, to a certain extent, free national interest rate policy from the task of defending that country's currency. It would no longer be necessary to implement hikes in the interest rate as a proportion of the desired rise in the currency - and this would make it easier to make monetary policy serve the interests of investment. These findings have been based on the following calculation (J. Frankel, 1996, p. 57-58):

Let's assume that domestic investments have an annual yield of i %.

The yield required on overseas investments, i^* , depends on the Tobin tax t , and on the duration of investment y , measured by the number of years, or fractions thereof.

Imagine the case of a financial trader who first invests funds overseas, and who then repatriates the entire investment after a period y . In such circumstances, the trader would be paying taxes twice - both on the way out, and on the way back in. For the overseas investment to be justified, it would have to yield at least as much as a domestic investment - and we can therefore calculate its breakeven point:

$$(1 + i^*y)(1 - t) = 1 + iy$$

We can rearrange this equation to express i^* :

$$i^* = \frac{iy + 2t}{y(1 - t)}$$

or:

$$i^* = \frac{i + \frac{2t}{y}}{1 - t}$$

Let's assume now that the interest income is repatriated whilst the principal remains overseas. The trader would still have to pay the tax twice. For the overseas yield to at least match the domestic yield, the following equation would have to hold:

$$i^*y(1 - t) - t = iy$$

or:

$$i^* = \frac{iy + t}{y(1 - t)}$$

or again:

$$i^* = \frac{i + \frac{t}{y}}{1 - t}$$

This final equation clearly shows that the Tobin tax will above all affect short-term trades. Let's take a situation in which the domestic yield is 10%, and the Tobin tax rate is very low, for instance, 0.1% per annum. On a 12-month investment, the overseas yield i^* must at least be equal to 10.1% to match the domestic yield. If the trade has a one-month horizon (1/12th of a year), i^* would have to exceed a yearly rate of 11.3%; 15.35% for a one-week trade; or 46.5% for a one-day trade⁹.

Thus, the tax allows for an interest differential of 1.3% over a one-month period; 5.35% over a one-week period; and 36.5% for a day trade.

The second benefit of the Tobin tax, one which the author himself often evokes, is rather limited in scope, as it only has short-term effects, and is closely tied to the tax rate itself. If the Tobin tax rate is too high, it would engender tax evasion. Most of the economists who are in favour of the Tobin tax propose a range of 0.1%-0.25%, as they feel that these rates are suited to the levels of commission currently being paid on foreign exchange transactions. With such a low rate, potential tax revenues are reduced; but the stabilising effect on the exchange rate remains whole¹⁰.

Thirdly, the tax revenues would make it possible to fund the fight against domestic poverty, as well as to subsidise global projects of mutual interest. This latter benefit of the Tobin tax, which J. Tobin only sees as a by-product of the idea, and not as its main justification, is nevertheless of great significance. The magnitude of the tax revenues at stake would be difficult to estimate since the tax would lead to a reduction in the volume of speculative trading.

J. Frankel (1996, p.62), offers the following calculation: in 1995, on the London and New York currency markets¹¹, the ratio between the total volume of trading compared to the

⁹ J. Frankel (1996, p.58) implicitly calculates on the basis of a 360-day year. If we were to use the more plausible hypothesis of 240 working days in the year, i^* becomes 34.5%.

¹⁰ J. Frankel, 1996, has put together a small model which allows him to reach the following conclusions: with a tax of 0.001%, a one-year investment in a foreign asset would have to yield at least 10.1% to be preferred to an investment in a domestic asset which yields 10%. However, for a one-day trade, the overseas asset would have to yield 46.5% to remain attractive. This cannot help but discourage the vast majority of speculators - even the most audacious.

¹¹ In April 1998, the foreign exchange markets located in Great Britain and in the United States represented 50% of all worldwide currency trading, against 46% in April 1995 (BIS, 1998, p.8)

volume of trading involving at least one non-financial agent, was five to one. Now, in a somewhat extreme scenario, this ratio could fall to two to one, representing a drop of 60% in annual trading volumes. As, in 1995 the daily volumes on the global currency markets reached 1230 billion dollars¹², an annual volume of 295.2 trillion dollars (over 240 working days), a drop of 60% would mean a new annual volume of 118.1 trillion dollars. A Tobin tax rate of 1% would create additional tax revenues of 1.118 trillion dollars. A Tobin tax rate of 0.1%, the most proposed level, would bring in 118.1 billion dollars.

In April 1998, daily volumes on the global currency markets reached 1587 billion dollars (BIS, 1998),¹³ that is, an annual volume of 380.9 trillion dollars. By doing the previous calculation, and using a Tobin rate of 0.1%, tax revenues could reach 152,4 billion dollars.

Limitations of the Tobin Tax.

There are two clear limitations to the Tobin tax: First, it does not stop major speculative attacks on a given currency. And second, it does not solve the problems caused by the disappearance of the previous international monetary system, and by the fact that it has not yet been replaced.

The Tobin tax only represents a “few grains of sand thrown on the roaring fire of international finance.” (Tobin, J., 1978, p. 153-9).

The two limitations listed above intimate that the Tobin tax must be supplemented by other measures aimed at reducing the power which has been acquired in recent years by the international financial markets - and that these markets must again be placed under the tutelage of political authorities with the responsibility of defining national economic policies. All the same, the Tobin tax, in and of itself, can greatly enhance the supervision of financial markets. We shall defend this point of view whilst analysing the common objections to the Tobin tax. These objections can be divided into two different categories. First, there are fundamental objections which attack the tax's very existence. Will this tax paralyse the currency markets to the extent that they are no longer able to function? Second, there are objections concerning the tax's feasibility.

3. What are the Fundamental Objections to the Tobin Tax?

The currency markets fulfil an essential function in the global economic system. They facilitate international transactions (overseas trading, direct foreign investment, portfolio investment) by making it possible to convert units of money. They enable the

¹² This figure includes spot deals, forwards, FX swaps, as well as other currency derivatives (currency swaps, options, and miscellaneous.) These are net figures, which have swapped out double accounting. Source BIS, 1998.

¹³ 1490 billion dollars for the traditional instruments, and 97 billion dollars on derivative currency products.

transmission and dissemination of risk between those who wish to protect themselves against the consequences of exchange risk, and those who assume this risk in the hope of making money out of it.

These two functions are closely related. Since exchange rates are continuously changing, it is impossible to complete an international transaction without taking on some currency risk. Given the conditions under which economies function now, it is impossible to imagine the euthanasia of speculators - if this were to occur, there would be no other economic agent who is ready to accept those risks which everyone else refuses to take. Speculation is an integral part of markets - without it, they can neither exist nor function. Does this mean that the Tobin tax should be rejected, in that it may penalise indiscriminately both the speculative trading, which is indispensable if commercial transactions are to take place, and "purely" speculative dealing? For the following reasons, we are not of this opinion.

Excessive Trading volumes on the currency markets.

Trading volumes on the currency markets are 60 times higher than that which is required for international commerce to take place¹⁴. This was not the case in the 1970's. Back then, the financial markets were not as deregulated as they are now. We can reasonably estimate that the Tobin tax, even though it would cause a substantial drop in trading volumes¹⁵, would allow a sufficient volume of financial trading to continue - enough, in any event, to enable speculators to offset the risks which are caused by international commerce, and by direct foreign investment. Still, those who criticise the Tobin tax will object that any hindrance to the free circulation of capital reduces market liquidity and increases exchange rate volatility - the exact opposite of that which the measure seeks to obtain.

This criticism is based on the supposedly obvious link between market liquidity and market stability. Yet this link has never been proven - far from it. Empirical investigations do not confirm the existence of any correlation between an increase in market volumes and an increase in market stability (I. Grunberg, M. Ul Haq, I. Kaul, 1996, p.5). Over the last two decades, it has even been possible to observe a parallel increase in the volumes traded on the currency markets, and a rise in foreign exchange instability.

Above and beyond this absence of empirical proof, the arguments in favour of an unfettered market liquidity, as a supposed guarantee of exchange rate stability, are also empirically weak.

¹⁴ P. Arestis and M. Sawyer (1997, p.760) arrived at this figure by simply comparing the yearly volumes on the global currency markets (300 trillion dollars in 1995) with the volume of international commerce in that year (5 trillion dollars).

¹⁵ See the example given in section 1.

Speculation is not always a factor of stabilisation.

Starting with M. Friedman (1953) and the Monetarists, and continuing with the School of Rational Expectations, many people's view of the financial markets has been dominated by the idea that speculation is a factor of stabilisation. Financial markets supposedly function like Walrasian markets. Speculators determine equilibrium prices. They sell when the existing price is higher than the equilibrium price, and by so doing, they precipitate the return to equilibrium. Conversely, they buy when the existing price is lower than the equilibrium price. In this conception, there is little difference between speculation and arbitrage - and both participate in the convergence of financial markets towards a state of stability.

Years later, monetarist theory has been completely contradicted by the facts. The advent of a floating rate system, in the early 1970's, has had a magnifying effect - speculative bubbles have been created in the currency markets, yet this exchange rate volatility has not even come close to rebalancing certain nations' endemic current account deficits, nor has it made it possible for their economic policies to become more autonomous.

From a theoretical point of view, the idea that speculation is always a factor of stability is tantamount to an act of faith: one must believe that an equilibrium exchange rate exists, that speculators know what it is, and that their actions are always taken in reference to it, thus spurring the return of prices to their one, single equilibrium. However, the hypotheses which make it possible to demonstrate the existence, uniqueness, and stability of an equilibrium price are so radical as to be hardly credible. If there were a multiplicity of equilibrium prices, speculative attacks against exchange rates could be successfully unleashed, even in the absence of the macro-economic imbalances to which speculators are supposedly so sensitive (B. Eichengreen, C. Wyplosz p. 20, M Dooley, 1996, p.89-91). As for inflation and the level of interest rates, two other factors of which speculators are also supposed to be aware, we should note the example of the French franc, which in 1993 was not even close to being overvalued with respect to the Deutschmark, and yet which became the object of a speculative attack which led to an abandonment of the franc's margin of fluctuation of 2.25% against the ECU.

Thus, speculation is not always a factor of stability, and should not be given the role of controlling exchange rate management. As Keynes had already noted, the currency markets will alternate periods of stability and instability. Using a Keynesian approach to finance, we would say that periods of stability can be explained by the existence of a convention, that is, an average point of view, the opinion of the majority of traders, concerning the state of the economy at some future date¹⁶. This convention serves as a benchmark, and it creates a stable environment, a state of confidence, allowing traders to decrypt the information which they receive on a regular basis. Decoding new bits of

¹⁶ On the notion of convention, see chapter 12 of J.M. Keynes's General Theory (1936), and A. Orlean (1986).

information, traders develop their own expectations of short-term exchange rates using probability calculations¹⁷. These short-term expectations are heterogeneous, and they lead to temporary fluctuations in the exchange rate. Arbitragists with open positions, for example, speculate by betting on a weak currency which is in a state of backwardation, unlike speculators who are seeking capital gains by betting on a strong currency which is usually in contango (D. Plihon, 1991, p. 38). These two types of operations have inverse effects on the currency market - they offset one another partially and cause short term fluctuations which are compatible with the existence of a convention - as long as the volatility is temporary and non-systematic. In sum, these periods of stability are characterised by the fact that the elasticity of expectations is less than one (J. Hicks, 1946, p.254-255), meaning that a rise in the exchange rate at any one time does not lead to the expectation of a higher rate over the long term¹⁸.

In this Keynesian vision, periods of instability prevail in the currency markets when traders start to lose their trust in the conventions which govern the long-term expectations. During these periods of a crisis in confidence, the traders who remain active in the markets have no other choice but to imitate one another. The generalisation of this imitative behaviour creates a herd mentality which facilitates the creation of speculative bubbles, be it on strengthening or on weakening currencies, as such a time as the currency markets are in a state of uproar. A drop in the current exchange rate can provoke an expectation of a greater drop in the future exchange rate. The ambient instability stems from the fact that the drop in the current exchange rate leads to a drop in current demand, because of the expected drop in the currency's future exchange rate. The lower current demand ensures that these expectations become self-fulfilling. In such circumstances, the elasticity of expectations is greater than one.

According to P. Arestis and M. Sawyer (1997, p. 760), the main use of the Tobin tax would be to intervene upstream from the markets, that is, before a speculative bubble is created. A rise in the current exchange rate above its normal value would not lead traders to expect a further rise, since the cost of the tax would discourage them from buying enough of this rising currency to magnify its strength. It would therefore be easier for the monetary authorities to intervene and to maintain exchange rate stability, and in the end, the volume of transactions to be taxed would not be enormous. The Tobin tax would make a positive contribution to the stabilisation of exchange rates by acting as an "uncertainty reducing institution" through the influence which it would exert in the creation of expectations. Thanks to the tax, the elasticity of expectations

¹⁷ According to Keynes, "... if conventions do exist, an investor can legitimately gain some confidence from the idea that he is *not running any other risk* that that of a real change in the information concerning the near future - and he can try to develop his own opinion on *this probability risk*, which, in any even, will not be very large. (1936, p.164-165, our italics). In their analysis, L. Orio and J.J. Quiles correctly state that "...it is the very existence of a convention which enables the future to be probabilised." (p. 28).

¹⁸ J. Hicks (p. 205) defines the elasticity of an individual's expectations concerning the price of a good X as the ratio between the expected future rise in X's price over the present rise in X's price.

would remain less than one.

The empirical investigations undertaken by J. Frankel in 1996 (p. 54) go along with this analysis. His findings showed that exchange rate expectations with a maturity of less than 3 months are by nature extrapolative, and that they only become adaptive, regressive, or based on a notion of mean reversion after this 3-month mark. Thus, an increase over one week of 1% in the spot exchange rate would lead traders to expect an additional increase of 0.13% the following week.

As a result, the Tobin tax, by its disproportionate impact on short term transactions, would contribute to a reinforcement of those long-term expectations which by nature create greater stability, based, as they are, on convention, and on the fundamental variables of macro-economics. Traders would have to take the Tobin tax into account and include it in their assessments of a situation - that is, in their convention. The tax would make it more difficult for a minor and temporary speculative attack to generate a speculative bubble, which could then be transformed into a major speculative attack. On this point, one can acknowledge the argumentation employed by P. Arestis and M. Sawyer concerning those periods during which the currency markets function "normally". It may well be, however, that the tax is not sufficiently dissuasive against a major speculative attack, of the type that can result in a major currency crisis. With a Tobin tax rate set at 0.1%, a position which is taken on a currency, only to be taken off within one week, would be hit by a tax which is equivalent to an annual interest rate of 10%.

Now, during the periods of currency crisis, speculators bet on a devaluation of at least 10%, within a period of a few days or, at most, a few weeks. Complementary measures are therefore necessary to help the Tobin tax in its fight against speculation. A first possibility would be to authorise those countries which have been victimised by a major attack to temporarily increase their Tobin tax rate until it reaches a prohibitive level (P. B. Spahn, 1995). Other measures can be envisaged as a complement to the Tobin tax.

Malaysia, for example, adopted a set of strict currency controls in September 1998 to staunch the flight of capital, and to force companies and financial traders based in Malaysia to repatriate their capital. These measures, aimed at stemming the collapse of the exchange rate without having to raise interest rates to an excessive level, thus worsening the recession, unleashed a barrage of criticism from the international financial community, which removed Malaysia from its list of acceptable countries - whilst hypocritically keeping silent about Taiwan's existing currency controls¹⁹.

These other measures are often contrasted to the Tobin tax, or described as an alternative to it. They are systematically presented as being above all relevant for Third World countries - yet no one has ever explained why they could not be used by the wealthy nations. The measures adopted by Latin American countries, such as Chili, are often cited as an example. Many lessons can be learned from these countries' experiences - if they are interpreted correctly. In the early 1990's, the countries of Latin

¹⁹ On this point, see "The Economist", 22-28 August 1998, pl.59-60.

America were again faced with a massive inflow of foreign capital. Many then pegged their currency to the dollar, at a fixed or a quasi-fixed rate²⁰, with the aim of eradicating the hyperinflation from which they were suffering. They committed themselves to a strategy of opening their commercial and financial markets and tried to restructure their economies to increase exports.

This excessive inflow of capital caused these countries' currencies to become overvalued, thereby worsening their trade deficits - and when this deficit reached a critical level, the international financial community would become frightened. A massive withdrawal of capital would follow, causing currency collapse, and a major economic crisis.

To counteract this phenomenon, Chile adopted in June 1991 a series of measures aimed at restricting the inflow of capital. Foreign banks which lent to Chilean companies and banks had to make a non-renumerated deposit of one year at the central bank, equal to 30% of the face value of the loan. Compared to the Tobin tax, this measure was especially expensive for those who were investing on a short-term basis. As M. Agosin and R. Ffrench-Davis demonstrated in 1996 (p.181-182), this system allowed Chile to enjoy a rate of growth which was higher and more stable than Argentina's or Mexico's²¹. Above all, it allowed Chile to avoid the crises from which these other countries have recently suffered.

One particularity of these measures is that a nation can impose them unilaterally - a definite advantage with respect to the Tobin tax. However, this does not necessarily mean that these steps comprise an alternative to the Tobin tax - rather, they could be used to complement it. The Tobin tax applies to all foreign exchange trading, to both capital inflows and outflows, whilst the Chilean system only covers inflows. The Tobin tax rate is much lower than the explicit and implicit rates which were applied by the Latin American countries (M. Agosin, R. Ffrench-Davis, 1996). Finally, the tax constitutes a first step towards the reform of the international monetary system, whilst the Chilean system is a set of defensive measures which does not help to solve the fundamental problem of exchange rate instability. Moreover, it concerns an emerging country, one which is dominated by the major capitalist nations, who are continuing to define the rules of international economics in a festival of self-interest.

As long as the dollar continues to dominate all the other currencies, together with its rivals the yen and the euro, a floating rate system will continue to engender exchange rate instability. However, we are not going to delve into this at the present point - as it is an issue that goes far beyond the present chapter, which is devoted to the Tobin tax.

²⁰ Chile was not part of this group, as it had abandoned fixed parities in 1982, following a major economic crisis which had caused its GDP to drop by 15%.

²¹ The reader should also study the example of Colombia, which adopted comparable measures. For a detailed analysis of this country's actions, see M.R. Agosin and R. Ffrench-Davis (1996).

IV. Is the Tobin Tax Feasible?

We may be convinced of the Tobin tax's usefulness - but the question remains as to whether it can actually be implemented. We will explore the two aspects of this question: the tax's political, and its economic, feasibility.

With the rise in power of the liberal (free market) ideology throughout the world, it is clear that, unlike the 1960's and 1970's, when governments considered it legitimate to regulate markets, the present era is not very favourable to the taxation of financial transactions. Yet, the financial markets are already subject to certain taxes, even though most people don't realise it (J. Frankel, 1996, Appendix B., p. 70). S. Griffith Jones (1996, p.146) gives the example of the City of London, where stamp duties on deals involving financial assets²² brought in tax revenues of 830 million pounds in 1993, about 1300 million dollars. She adds that the British tax authorities have also demonstrated their ability to counteract fiscal evasion by adapting the conditions in which they apply their tax policies.

In addition, we can hope that the financial crisis which started in South East Asia in autumn 1997, after the Mexican crisis of winter 1994-'95, will cause people to modify their attitudes towards this topic. Hopefully, this can become more objective when analysing the usefulness of a reregulation of the financial markets - a policy of which the Tobin tax could be a component.

Finally, the political feasibility seems less problematic once an analysis of the tax's economic feasibility, and of the issues which it raises, has been conducted. The first objection concerning the economic feasibility of the Tobin tax is that it supposedly cannot be implemented unless every country adopts it simultaneously. According to this viewpoint, financial capital's great mobility would cause a massive inflow of capital towards those countries which did not adopt the tax. Even worse, it would make sense for certain countries not to adopt the tax to attract the lion's share of those capital flows which are specifically undertaken in an attempt to avoid taxation.

P. Kennen has come up with an appropriate rebuttal to this objection (1996). Even if it is preferable that all the nations of the world adopt the Tobin tax, this is not a pre-requisite for its implementation²³. The tax would however have to be accepted by all of the world's major financial centres. This list includes the G7 countries, all other European Union countries that are not members of the G7²⁴, plus Singapore, Switzerland, Hong Kong, and Australia. The political problems would indeed be considerable - but it would be exaggerated to think that tax havens such as the Bahamas or the Cayman Islands could hold off the Tobin tax all by themselves. As J. Tobin has stated (1996), if these tax havens are all that attractive, why is it then that the international financial community

²² Stamp Duty on Security Transactions.

²³ See an interview with J. Tobin in *Le Monde*, 17 November 1998.

²⁴ Tax havens such as Luxembourg, the Channel Islands, and the Isle of Man.

has not already massively migrated towards them, given the taxes which are already being levied in the main financial centres?

The question still remains as to whether the Tobin tax would be the last straw - that is, the measure which finally provoked a massive flight of capital. However, there are at least two arguments which counteract this concern. First, as P. Kennen notes, the currency markets currently function in such a way as to distinguish between the site where the order is given to buy or sell a currency (the trading site), the place where the deal is booked (the booking site), and the place where the transaction actually occurs (the settlement site). If currency trades are taxed at their trading site rather than at their booking site²⁵, then the fixed costs which would result from a displacement of trading rooms²⁶ would discourage traders from trying to escape the Tobin tax by migrating towards countries which refuse to apply it. It is only when the banks are planning the renovation of a trading room, or the building of a new one, that they will want to consider the alternative of getting themselves established in a tax haven.

Second, to staunch the phenomenon of progressive migration, P. Kennen suggests that a punitive tax²⁷ be levied on any transaction involving a country which refuses to apply the Tobin tax. The only deals which would escape this type of tax would be those between two tax havens. A very large number of banks and other financial agents would have to decide to migrate before it becomes worthwhile to eschew the advantages of the main financial centres (their great liquidity, and economies of scales). Unless everyone migrated at once, the first institutions to move their operations to these tax havens would have to pay a very high price.

A second objection involves the possibility that certain players could escape the Tobin tax by substituting derivative products for spot foreign exchange trading. The answer to this is that, in principle, the tax should be extended to all derivative trading. For instance, a three-day forward contract²⁸ is a close relative of a two-day spot deal. For this reason, the tax would have to be levied on forward transactions as well.

A forex swap²⁹ is also a close relative of a spot deal. Banks usually use these trades for their limited risk interest rate arbitrage plays, or else, to cover their currency positions.

²⁵ For a detailed analysis of the respective advantages and disadvantages of taxing at the trading or the booking site, see P. Kennen, 1996, p. 112-115.

²⁶ It is very expensive for a bank to run a trading room. Costs include human resources, capital costs, and financial costs such as the capital which serves as trading collateral.

²⁷ P. Kennen envisages, for example, 500 basis points (5%) instead of 10 or 2.5.

²⁸ A currency forward is a forward deal in which traders commit themselves to buying or selling a certain quantity of a currency, at a given rate and for a fixed maturity. These contracts are traded over the counter against spot deals. D. Plihon, 1991, p.20.

²⁹ "A forex swap is a financial trade in which two parties commit themselves to an exchange of currencies today, for example, French francs against dollars at the spot rate, and to the

For this reason, forex swaps are very sensitive to transactional costs, and P. Kennen suggests that they be construed as one and the same transaction and therefore be taxed just the once. On the other hand, since the purchase and the resale of a futures contract³⁰ follows the same logic as a sale and resale in the spot market, a currency future could be taxed both on the way in and on the way out. The tax would cover the notional value of the contract and would be collected by the clearing centre.

The situation with currency options is somewhat more complex³¹. There is no justification for not taxing them since they are a close relative of a Futures contract. However, their taxation creates certain problems. The first one has to do with the fact that a large percentage of options are dealt over the counter, and this would make it difficult to collect the Tobin tax. The second problem has to do with the fact that some options are never exercised; this could make it all the more delicate to justify levying the full tax rate on the option's face value.

Finally, other problems arise concerning the level of tax receipts, depending on whether the market is dominated by economic agents who are seeking to cover themselves against a real exchange risk, or by speculators who are trying to profit from market volatility. A company which needs a certain quantity of Yen in three months to settle an invoice might buy either a forward contract, futures, or a currency option. If the Tobin tax were only to be levied on forward contracts, the company would choose futures or call options; this would reduce the volumes traded on the forward markets, and the taxes which could be collected on them. Still, if the firm really needs Yen three months hence, it will in the end be buying Yen, albeit at the rate and on the future or the option's maturity. Hence, a spot trade will take place, and this will be taxed, thereby compensating the loss of fiscal revenues from the forward markets.

Nonetheless, if the firm is simply seeking to speculate on a rise in the Yen, having no real need of this currency, and if the Yen does not rise, the company will abandon its option (not exercise it). In this case, the loss of tax revenues from the forwards or futures markets will not be compensated. If one of the main goals of the Tobin tax is to increase fiscal revenues, a solution to the taxation of currency options must be found. However, if the goal is simply to stabilise exchange rates, the fact that the option has not been

exchange of the same currencies at the contract's maturity (3 months, 1 year, etc.) at a forward rate which will be determined now." Cf. P. Fontaine, 1996, p. 60. Also see D. Plihon, 1991, p.22.

³⁰ "Currency futures are forward contracts in which traders commit themselves to buy or selling a certain amount of currency, at a rate and at a maturity which is established in advance." Cf. P. Fontaine, 1996, p.34. Also see D. Plihon, 1991, p. 25.

³¹ "A currency option gives its owner, the purchaser of the option, the right but not the obligation to buy (a call option) or to sell (a put option) a given amount of currency at a rate which is determined in advance, the strike price, and at a maturity which is also determined in advance. For this right, the purchaser pays a premium." Cf. P. Fontaine, 1996, p.44. Also see D. Plihon, 1991. p.28.

exercised is not a problem as such, since the priority is to levy taxation on currency deals³².

P. Garber (1996) evokes a final issue, one which involves the effects of substitution. Treasury Bills of a same maturity can be exchanged instead of currencies. These securities would then be sold immediately. However, this type of substitution is not without risk since different markets do not share the same level of liquidity. Each party must purchase Treasury Bills, exchange them, and then sell them - and each transaction carries with it frictional costs. Since these deals would not be perfectly synchronised, the two parties could be exposed to interest rate risks in two separate countries. This risk could be covered if the two banks agreed to repurchase the securities at the market price just before the swap took place. However, the authorities could argue in this situation that the real objective of the swap was to avoid paying the Tobin tax. People will dream up increasingly complex and opaque derivative products - but by so doing, they are running the risk of illiquidity.

As J. Tobin and P. Kenen note, it is hard to imagine that the banks will consider it worthwhile to go through all these steps just to avoid a small tax on the spot foreign exchange market! We can add to this that any tax generates some evasive behaviour with some economic agents (though not with all) who do not want to pay. Yet no one has ever seriously advocated the abolition of income taxes simply because of the existence of a certain amount of tax evasion. In addition, we know that a lower tax rate does not lead to an increase in tax receipts - this has been demonstrated by certain economists' unsuccessful attempts at empirically substantiating the Laffer curve. So why should we demand that there be zero tax evasion before we deem the Tobin tax to be legitimate?

Conclusion

We can now summarise the main arguments made in this chapter concerning the usefulness and the limitations of adopting a measure such as the Tobin tax within a framework of reforms aimed at reducing a level of financial instability, which has become unacceptable. First of all, this is a tax, proposing a type of relationship between the public and private sector that leaves no room for collusion between these two spheres. Moreover, it is a preventative measure, aimed at stemming currency crises before they break out. Most other reforms involve an ex post facto crisis management - they try to save market systems that have failed. Markets and traders have been rescued too many times in the past. One example was the intervention of the US Federal Bank in September 1998, when it lowered its discount rate three times to shore up Wall Street. All the while, it was putting pressure on the large international banks, creditors of the big US hedge funds, which were considered "too big to fail". Neo-liberals (free market economists)³³ tolerated these measures - and yet they consider the Tobin tax to be intolerable, because of the control over short-term capital movements which it would

³² On this question, see J. Tobin, 1996, p. xv

³³ Although the Financial Times did criticise the rescue of the hedge fund LTCM as an unwanted collusion between the public and the private sectors.

introduce!

Second, the Tobin tax is a co-operative measure which is universal in nature - and yet, at the same time, each country would be responsible for its implementation. It would not be run by a council which was dominated by the countries which issue the world's main currencies. All units of money, from King Dollar to the dependent currencies, are concerned. This would also have the benefit of dissuading countries which feel that they have been given a raw deal from resorting to nationalism. Moreover, reducing the competition between the key currencies is one of the main issues which a reform seeking to stabilise international financial relationships has to address.

Third, the Tobin tax designates those who are responsible for the instability of the international financial system - the major players of the world's currency markets. The aforementioned argument, wherein speculation is deemed to be a factor of stability, does not explain the dynamics of financial behaviour, nor does it account for its internal logic. By criticising this logic, the Tobin tax is an attack on the current political consensus, with its neo-liberal characteristics - and it is a counterattack against the idea that the free circulation of capital is advantageous because of the standards of profitability which it imposes.

This is not to say that the Tobin tax is a universal panacea against the financial deregulations which themselves are an intrinsic part of the capitalist mode of accumulation. However, it is important to study this tax, and to analyse the way in which it has been attacked - as these criticisms, in and of themselves, express a political conflict. Hence the priority given in this chapter to a discussion of the political dimension of the debate over the Tobin tax.

Since autumn 1997, several ideas have been mooted involving a new regulation of the global monetary and financial systems - yet they have all been nothing more than a symptom of the excesses of a capitalist financial system which has been sanctioned by its recent crisis. Economists have started to seriously discuss the idea of taxing currency trading. This concept has gained a certain popularity, especially in Europe, because of its aim, which is to establish control over short term capital movements. An ever-greater number of people are in favour of financially punishing the speculators whose actions in the markets were behind the 1997-'98 financial crisis. Public opinion wants to prevent further speculative bubbles and crashes. This is important, especially if one feels that political reforms should not only be the affair of financial specialists, or even of the governments alone - but that they should be debated and approved by the people who will be affected by them.

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