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Which Currency is Best for Business in a Small Country?

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Abstract

The optimal currency for a country is an important topic. While it is difficult to identify the best option overall, for all stakeholders and including political considerations, it is easier to answer the more limited question of the title: Which currency is best for business in a small country? Several kinds of currencies are discussed and three criteria that business companies are interested in are applied. Although there are opposing considerations, the best compromise for business in a small country seems to be a currency board with a fixed exchange rate that can be adapted in case of a crisis. A currency board is also the best protection against speculative attacks. The anchor currency should be that of the largest trading partner, especially if the trade with it is much larger than with all other ones.

JEL-Codes: E42, F31, F45, G01, M21

Welche Währung ist am besten für Unternehmen in einem kleinen Land?

Zusammenfassung

Die optimale Währung für ein Land ist ein wichtiges Thema. Während es schwierig ist, die beste Option überhaupt zu identifizieren, für alle Stakeholder und unter Einbezug politischer Überlegungen, ist es einfacher die begrenztere Titelfrage zu beantworten: Welche Währung ist am besten für Unternehmen in einem kleinen Land? Dazu werden verschiedenen Arten von Währungen diskutiert und drei Kriterien angewandt, an denen Unternehmen interessiert sind. Obgleich es gegenläufige Überlegungen gibt, scheint der beste Kompromiss für Unternehmen in einem kleinen Land eine devisengesicherte Anbindung an eine Ankerwährung zu sein mit einem festen Wechselkurs und Anpassungsmöglichkeiten im Falle einer Krise. Solch eine Anbindung ist auch der beste Schutz gegen spekulative Angriffe. Die Ankerwährung sollte die Währung des größten Handelspartners sein, insbesondere wenn der Handel mit diesem deutlich größer ist als mit allen anderen.

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Which Currency Is Best for Business in a Small Country?

1. Introduction

The optimal currency for a country is an important topic. The euro-zone opens a new option for a currency union although it is not an optimal one. Which kind of currency and perhaps currency union is optimal is an open and difficult question (see for example Mundell 1961 and De Grauwe 2014). It is also a question of high practical importance.

While it is difficult to identify the best option overall, for all stakeholders and including political considerations, it is easier to answer the more limited question of the title: Which currency is best for business in a small country? The euro as a common currency with the euro-zone would reduce transaction costs and exchange rate risks. However, there are other risks instead like a break-up of the currency union or a fundamentally wrong exchange rate, if not at the beginning then in and after the next crisis. Especially a too strong currency without the option of currency devaluation is a large problem because it aggravates the crisis and demands painful real devaluation. For business companies this means that their costs including financial costs and debt service are too high and the demand for their products and services breaks down.

In the next chapter the main kinds of currencies a country can choose from are presented. In the third chapter three criteria are discussed what business companies with their headquarters or at least operations in a small country are interested in concerning the currency of this small country. In the fourth chapter these criteria are applied to the different kinds of currencies presented in the second chapter. The last chapter concludes.

2. Kinds of Currencies

There are different kinds of currencies with different relationships to other currencies (for a classification see International Monetary Fund 2004). The most important ones are explained in this chapter.

2.1. Free Floating Currency

A currency can be free floating. In this case its exchange rate is determined by supply and demand. The supply and demand can be set by market forces alone or influenced by central

banks. While there is no clear strategy to reach a fixed exchange rate as in the following cases, there can be ad hoc attempts to lower or boost the value of one's own currency. Other central banks can support such attempts, ignore them or try to counteract them, which may even result in a currency war. The main global currencies like US-dollars, euros and yens are free floating against each other by now. As a result, the following strategies can be used in relationship to one of these global currencies but not to all of them at once. A currency pegged to the euro will be free floating to the US-dollar, although not independently but in line with the euro.

2.2. Pegged Currency

There are several steps between really free floating currencies (see the last section 2.1.) and currencies with fixed exchange rates (see the next section 2.3.). They involve a kind of pegging one's currency to one or several other currencies. For example the currency can fluctuate 2 % up or down around an otherwise fixed exchange rate. Alternatively, the limited fluctuations can be around a flexible rate itself like the average of the exchange rate of the last three months instead of a fixed rate. This means that a central bank has, alone or with others, to intervene when the bands of allowed fluctuations are reached but within these bands the fluctuations are free. In normal times there are less interventions than with a fixed exchange rate and the market forces can be observed within limits. However, it can happen that always one extreme of the peg is reached such that it acts as a fixed exchange rate or a brake on a faster change of the exchange rate.

2.3. Fixed Exchange Rate

A fixed exchange rate means that there is no fluctuation between two (or more) currencies. There are several ways to fix an exchange rate. In the case of two currencies the central banks of both can agree to intervene in the currency markets such that these currencies are (nearly) fixed. One central bank alone can always guarantee that the value of its own currency does not go up by selling it on the market, at least if the currency is fiat money and can be created by the central bank at will. However, one central bank alone cannot guarantee that its currency does not devalue without taking some precautions. A currency board as explained in the next section is one way to defend one given exchange rate to one particular other currency. Another way is an agreement with one or several other central banks to fix together

the exchange rate(s). Nevertheless, there can be speculative attacks to test the commitment of the central banks and the governments behind them.

2.4. Currency Board

A currency board means that a central bank creates its own currency only in exchange for another, foreign currency. As a result the central bank has enough reserves of this foreign currency to buy back its own currency at the fixed exchange rate at which it sold its currency in the first place. The value of its own currency depends on the value of the foreign currency and thus the monetary policy of the corresponding foreign central bank. Moreover, the domestic central bank and thereby country has to earn and save this foreign currency. An independent monetary policy is not possible and the central bank at home cannot do much beside the administration of the currency board. Finally, the creation of money by credits in the banking sector has to be forbidden or cannot be guaranteed by the central bank because it has no reserves for this kind of bank money.

2.5. Metal-based Currency

Instead of using a foreign currency in a currency board as a guarantee for one's own currency, a country can also use valuable things instead like precious metals. Historically, gold or silver were mostly used for this purpose. Paper money can partially or totally be guaranteed by gold for example. It is also possible to use gold coins as a currency directly. Because their value depends only on the quantity (and quality) of gold, exchange rates of countries with gold-backed currencies are determined by the gold and thus fixed as long as the amount of gold is not changed by one of the countries.

2.6. Using a Foreign Currency as One's Own

A country can decide to use a foreign currency as its own ("dollarization"). An independent monetary policy is totally impossible in this case. It is also much harder to change this regime than to adjust a currency board or the exchange rate guaranteed by this board. The country would have to introduce its own currency first. This is a kind of protection for savers and investors in a country with weak institutions.

2.7. Monetary Union

Two or more countries can create a monetary union with a common currency. The most famous example is the euro-zone with eighteen European countries using the euro. Then the monetary policy is the task of a common central bank like the European Central Bank (ECB). Decisions can be very political, especially since the members' interests and situations are quite different. It is also difficult to leave a monetary union because the national central and commercial banks are quite intertwined.

2.8. Parallel Currencies

Finally, it is possible to mix two of the options before. Most interesting is the case of a country with two parallel currencies at the same time. A country could use gold coins and paper money at the same time or its own currency and a foreign one. In case of a fixed exchange rate between these parallel currencies Gresham's Law applies, according to which the worse money drives out the better one (see Rolnick/Weber 1986). This means that everyone will hold back gold coins for example and pay with paper bills. With free floating parallel currencies in the same country the higher value of the better currency will correct for this. By this way Gresham's Law can even be reversed such that a very weak currency with hyperinflation is replaced by a stronger and more stable one.

3. Criteria what Kind of Currency Business Likes

While it is difficult to identify the best kind of currency overall, for all stakeholders and including political considerations, it is easier to answer the more limited question in the title of this article: Which currency is best for business in a small country? To answer this question, criteria are given what business is interested in (for a more general discussion see for example McAleese 2004). Individual firms or special industries like banking can have other interests but the following criteria are plausible for the business sector overall. In the next chapter these criteria are applied to the kind of currencies presented in the last chapter.

3.1. Stability

Business is using money for its normal transactions and for longer-term investments. For both purposes a currency should be stable, not totally, but sufficiently. Stability means no large inflation or deflation in the country as well as quite stable exchange rates at least with the most important currencies for imports and exports. Stability is also important for foreign companies operating in a small country such that their investments are save and profits of value, while costs and revenues can be calculated in advance.

3.2. Small Undervaluation

For importing companies the exchange rate could be a little bit higher than purchasing power parity (PPP, see Cassel 1918) such that import prices are lower than domestic prices. However, for exporting companies as well as domestic companies that feel the competition from imports, that is for most companies it is the other way round that a weaker currency is better. By this way domestic products are cheaper than comparable imports, whereas exporting is easier and the costs in a country are lower. Anyway, this undervaluation should not be too large and it is eroded over time without a force reproducing it. In the long run prices are going in the direction of PPP but exchange rates adjustments can change all prices including wages at once. Finally, it is not possible that all currencies are undervalued because this is relative and for any undervaluation there has to be an overvaluation elsewhere as there has to be a deficit for any surplus. However, for a small country it is easier to have and keep a small undervaluation because it is not important enough for reactions or even retaliation by much larger countries.

3.3. Growth-friendly Monetary Policy

Finally, business is interested in a monetary policy that generates growth without too many risks (undervaluation can also be good for growth, cf. Béreaua/López Villavicenciob/Mignon 2012). Normally this is a mildly expansive monetary policy. Accordingly, low inflation is better than higher inflation (a kind of instability) but also better than no inflation at all (cf. Akerlof/Dickens/Perry 1996) or even deflation. When a crisis occurs, it should be possible to react to it (cf. for example Fornaro 2015). Therefore a too stable currency that cannot be adopted in any case is dangerous, while too much interference by politicians is also not in the interest of business companies.

4. Comparing the Currency Options

In this chapter, the different kinds of currencies presented in the second chapter are looked at again to find the one that is best for this mix of stability, low risks, low inflation, a little

undervaluation and monetary policies with a focus on growth. Moreover, the perspective will be that of business companies in a small country. Smallness is less about the absolute size of a country economically or even geographically and more about the ratio of imports and exports compared to the domestic economic activity of a country (and the economic activities of other countries because little trade for a large country can be quite huge for a small trading partner). A country that is economically self-sufficient can have a currency as it likes. However, most business companies profit from international connections and thus are interested in a good currency according to the criteria of the last chapter including quite stable and not too high exchange rates. When there are much fluctuations between the main global exchange rates, these fluctuations should be minimised in regard to the most important exchange rate for the country (or business).

4.1. Free Floating Lacks Stability

Given these criteria a (really, not only formally) free floating currency is not optimal for a small country, at least for business companies in this country and from abroad. Possible instability is the main problem. Little inflows or outflows of money from a global perspective can change the market value of the currency of a small country a lot. On a perfect market there would not be any fluctuations without a real reason and even any speculative attacks would be countered by counter-speculation. In reality there can be large fluctuations even when the long-term average may be the value justified by the fundamentals of the real economy (like PPP). It is even possible that a large company influences the exchange rate of a small country by its own behaviour, normally detrimental to its own interests, for example by increasing the exchange rate and thereby its expenses when investing in the small country and decreasing it later when exporting profits or even disinvesting. This risk of instability is also negative for the fulfilment of the other criteria. A small undervaluation will only happen by chance. There could be as well a large undervaluation or a small or large overvaluation, all of which are less good for business. The inflation could be large or low or negative (i.e. deflation). When the central bank tries to fight too large fluctuations in the currency value, it has less or no room to realise other objectives by its monetary policy. As an example, high interest rates can be used to stop capital outflows and thereby devaluation but they have detrimental effects on real investments, consumption and growth.

4.2. Currency Pegs

A pegged currency is more stable than a free floating one. However, it is not so easy to stabilise a currency in case of a crisis or when there are strong market forces against the peg as will be shown in the next section 4.3. for the case of a fixed exchange rate. Limited flexibility can make this task even more difficult because everyone can see how the limits are reached and tested.

4.3. Fixing an Exchange Rate Is Difficult

A fixed exchange rate is stable, at least between the currencies with the fixed exchange rate and as long as the fixing does work. As explained in section 2.3., one central bank can always guarantee that its own currency does not increase in value. The converse guarantee against devaluation is only possible with sufficient reserves (for example with a currency board, see the next section 4.4.) or an agreement with the other central bank(s) to stop any increase in the value of its currency (or their currencies). The problem with such an agreement is that it can be broken if it can be negotiated at all in the first place. This article concentrates on small countries that are more interested in fixed exchange rates with a larger country than the other way round. Accordingly, the larger country may not be interested in an agreement at all or may not honour it in the case of real problems.

4.4. A Currency Board Is Stable

A currency board is a way to stabilise a fixed exchange rate. It can be applied unilaterally by a small country that wants to anchor its currency to another one, normally from a much larger country. The small country should choose the currency of the economically most important trading partner, which is quite stable by itself. The central bank of the small country gives out its own money only against money of the larger country at the fixed exchange rate. When the currency board is complete, then there is enough foreign money to guarantee this fixed exchange rate for all outstanding money from the central bank. However, this implies enough foreign currency in the first place which the central bank and thereby the country needs to save before starting with the currency board. An alternative is an incomplete currency board with lower reserves that are still high enough to guarantee the fixed exchange rate for all outstanding money of the country that can be reasonably expected to be exchanged. Some money will always remain in circulation or conversely be locked away such that it will not be changed into the foreign currency. In practice, a central bank can start with

an incomplete currency board and increase the ratio of money backed by foreign currency over time, for example by giving out new money only for foreign currency at the fixed exchange rate.

A problem is bank money created by commercial banks. The central bank has not enough reserves to guarantee all of this money, too. Thus this kind of money creation has to be prohibited or at least should not be guaranteed as money from the central bank. In case of a severe banking crisis, it is possible to decide what is worse, the collapse of the banking sector or abandoning the currency board. It is an advantage of a currency board that it is very stable but not totally so. If necessary an adaption is possible. Another relevant case is a depression in the real economy that could be moderated by a devaluation.

4.5. A Metal-based Currency Is Risky

A metal-based currency is in a way like a currency board with a precious metal as gold taking the role of the anchor currency. There is a fixed rate at which the metal-based currency can be changed into gold and vice versa. The central bank has also enough gold to pay out all holders of banknotes. One problem of such an arrangement is that the stability of the currency is only relative to the value of gold (or another precious metal or a mix of two or even more such metals). However, this value is by itself instable, at least compared to real prices of other goods and to other currencies. That means the criterion of stability is not fulfilled. At the same time there is some risk of overvaluation of the metal-based currency relative to other currencies. Even if the exchange rate is set in the beginning quite low, it will increase over time on average, while the current exchange rate fluctuates a lot. Moreover, autonomous monetary policy is not possible but it is determined by the market price of gold. Finally, creating and holding the necessary gold reserves is quite expensive for a country and has to be paid for by its people and companies while gold pays no interest.

4.6. Using a Foreign Currency Is Very Stable

Using a foreign currency as one's own is like a currency board in many regards. Enough foreign currency is needed and an independent monetary policy is impossible while the value of the currency is stable, at least relative to the foreign currency that is used. The main difference is that actually using a foreign currency is even more stable than a currency board. A currency board could be abolished or the exchange rate could be changed. Even when the

foreign currency is replaced by one's own currency in the future, the people and business companies still have the foreign money in their pockets and its value is unchanged. However, even this difference vanishes in regard of bank accounts in the home country. If a government wants to change the currency, it could force the banks in its country to change all bank accounts accordingly. Only the foreign bills in circulation would keep their value or would even get a higher real value in the country introducing its own money. However, as long as a country uses the foreign currency as its own, it is as stable as this foreign currency and the exchange rate is fixed because there is no exchange but identity of the currency.

4.7. A Monetary Union Is Dangerous

A monetary union is like using a foreign currency by each member of the union. All members together can decide their common monetary policy but they cannot differentiate it for every member and its distinct economic situation. This may seem better than using a completely foreign currency because even a small country has some influence on the common currency, its central bank and monetary policy, while it has no such influence in case of a really foreign currency. However, the common currency of a monetary union is a collective good for which no one is fully responsible. There are also problems in collective decision making and the results can be worse for all than those taken by one country in its own interest. Thus a common currency is probable less stable than the currency of a good-managed large country and consequently also the currency of a small country attached to the currency of the large one by fixed exchange rates, a currency board or even using the same currency. Moreover, the business of the small country can profit from growth-friendly monetary policy in the large country whereas the monetary policy of a monetary union will be more erratic. Furthermore, splitting a monetary union is much more difficult than changing a fixed exchange rate or even a currency board or a foreign currency used in one's own country because the connections are much more complex. This is a large problem in a crisis when a country would need to devalue its currency or to borrow a lot but cannot as a member of a currency union. Conversely, a monetary union can also split with all accompanying problems against the will of a country. Finally, there is no example of a monetary union of sovereign countries that worked for a longer time. Either the monetary union splits or the sovereignty is lost and a common state created. That means a country should only join a monetary union if it is ready to cede its sovereignty and to become part of a larger state or at least political union.

4.8. Parallel Currencies Are a Compromise

Parallel currencies can have the advantages of both kinds of currencies that are used in parallel. It is possible to combine any kind of currency with each other or even with a second version of the same kind like currencies based in gold and silver or using euros and dollars at the same time. However, one large disadvantage consists of higher transactions costs as well as more risks inside the country. All prices have to be set in two currencies. Depending on the kind of currencies, they can freely float or they are fixed with or without the possibility of changes of the exchange rate from time to time. Normally it is better to have just one authoritative currency in one country. Nevertheless, people and companies should be free to use any currency they like in their transactions and treaties. Parallel currencies can be used in transition from one currency to another or by very small countries with two very large trading partners of nearly equal importance.

5. Conclusion

In this paper several kinds of currencies and criteria what business companies of a small country like for a currency were discussed. It is not possible to fulfil all criteria optimally at the same time. However, the best compromise for business in a small country seems to be a currency board with a fixed exchange rate that can be adapted in case of a crisis. A currency board is also the best protection against speculative attacks. The anchor currency should be that of the largest trading partner, especially if the trade volume with it is much larger than with all other trading partners. Nearly as good, but perhaps a little bit to stable in case of a crisis, is using a foreign currency as legal tender. A free floating currency is (possibly) too unstable. Fixing an exchange rate without a currency board is difficult and not trustworthy enough. A metal-based currency is instable because of fluctuation in the value of the precious metal like gold. A monetary union is dangerous because of collective good and collective decision making problems without much room for manoeuvre in case of a crisis. Finally, parallel currencies have higher transaction costs than just choosing the best kind of currency.

References

Akerlof, George/Dickens, William/Perry, George (1996): "Low Inflation or No Inflation: Should the Federal Reserve Pursue Complete Price Stability?", *Challenge*, Vol. 39, No. 5, pp. 11-17.

- Béreaua, Sophie/López Villavicenciob, Antonia/Mignon, Valérie (2012): "Currency Misalignment and Growth: A New Look Using Nonlinear Panel Data Methods", Applied Economics, Vol. 44, No. 27, pp. 3503-3511.
- Cassel, Gustav (1918): "Abnormal Deviations in International Exchanges", *Economic Journal*, Vol. 28, No. 112, pp. 413-415.
- De Grauwe, Paul (2014): *Economics of Monetary Union*, 10th edition, Oxford University Press, Oxford.
- Fornaro, Luca (2015): "Financial Crises and Exchange Rate Policy", *Journal of International Economics*, Vol. 95, No. 2, pp. 202-215.
- International Monetary Fund (2004): *Classification of Exchange Rate Arrangements and Monetary Policy Frameworks*, Washington, D. C., available at the internet at https://www.imf.org/external/np/mfd/ er/2004/eng/0604.htm (last retrieved 26th May 2015).
- McAleese, Dermot (2004): *Economics for Business: Competition, Macro-stability and Globalisation*, 3rd edition, Pearson Education, Essex.
- Mundell, Robert (1961): "A Theory of Optimum Currency Areas", American Economic Review, Vol. 51, No. 4, pp. 657-665.
- Rolnick, Arthur J./Weber, Warren E. (1986): "Gresham's Law or Gresham's Fallacy?", *Journal of Political Economy*, Vol. 94, No. 1, pp. 185-199.

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