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Summary: The adoption of a single currency in Europe has revived the problem of the accession of a currency to the status of international currency. The article presents the internationalization criteria generally used - the size of the issuing economy, its degree of trade openness, the choice of anchoring currency of third countries - to predict the emergence of the euro as an international currency. . These criteria of internationalization can in fact be widely discussed because they are based on an explanation of the internationalization of currencies by reasons of detention become less relevant in a context of increased financial flows. This is why the article shows how the process of internationalization of the euro can be based more on the development of financial flows denominated in this currency. In this perspective, the unification of the financial markets of the euro zone is a means of increasing liquidity that can create the conditions for the internationalization of the euro.

The currency question multiplicity explains the absence of the factors of the difficulties of a justifying encountered theory of the internationalization if one to evaluate this internationalization. This difficulty is coupled with a question about the weight of each factor and the way they combine. As a result, the authors who have sought to define the origin of the internationalization of currencies refer to several theoretical fields and rely on empirical work based on past internationalization experiences. However, the context being different, these are not necessarily transposable to the euro. Nevertheless, the criteria of internationalization traditionally invoked to explain the ac- cession of a currency to the status of international currency can be retained: the size of the emitting economy and its commercial openness will thus be decisive in the choice of the currency third countries. The link between the fundamentals of an economy and the internationalization of its currency will be presented in the first part. In a second part, we will explain why, in the context of the development of financial transactions, we should give less importance to internationalization linked to fundamentals alone. The relative size of financial transactions has become such that it effectively limits the scope of the traditional determinants that essentially explain the international diffusion of a currency by real flows. The internationalization of the euro will ultimately depend more on the financial flows that will be denominated in this currency. The size of the euro area financial markets and their liquidity will be decisive in this problem.

It is believed that a currency becomes international when it performs its functions outside its frontiers of issuance, even if his ability to exercise them can be both partial and reversible. As a medium of exchange, the international currency is used by private agents for direct exchange, but also as a vehicle for the settlement of commercial and financial transactions. The international currency is also used as a medium of exchange by the central banks to effect the intervention on the exchange markets. Private agents use the international currency as cash to quote and invoice exchanges or to label financial assets. It is also used as a unit of account by official institutions in defining exchange rate parities. It serves as a store of value for the private and official sectors.

The usual analyzes make it possible to explain the differences in the international distribution of currencies by the fundamentals of the economies, particularly the differences in size, and by the choice of third countries to favor one of them as a connecting currency.

Size of the monetary space, degree of trade openness and internationalization The finding that the heterogeneity of the economic and commercial powers of the countries of origin justifies the different degrees of internationalization between currencies is largely based on history recent economic Since 1850, the currency that has become the international currency has always been that of the dominant economy. If the size of the euro area becomes comparable to that of the United States whose currency is currently dominant, then the internationalization of the euro is likely to occur (Kirrane 1995).

The size of the economy of the country issuing the currency candidate for the status of international currency as a criterion of internationalization

For Philippe Martin (1997), the acquisition of the status of international currency is a growing function of its size, but this relationship is not linear. Historically, the currency of a large country has a higher probability of internationalization than that of a country of limited size. Once we admit that there is a link between economic size of a country and its internationalization currency, it should present some economic indicators to show the relative weight of each zone (euro, yen and dollar) in the global economy. The comparison of the economic indicators makes it clear that the euro area becomes a block of comparable size in the United States, either in terms of population or gross domestic product (GDP).

The presentation of economic indicators is relevant from the point of view of the internationalization of currencies only if it is accompanied by a significant degree of openness for economies. The ratios presented demonstrate a fairly comparable openness to trade, and ultimately limited in all three blocks. The share of imports in GDP is 10.2% in the United States and 6.6% in Japan, while foreign trade accounts for 18.3% and 15.2% of GDP, respectively. The share of imports over GDP in the euro area is higher than that of Japan and the United States. This observation is confirmed for the ratio of foreign trade to GDP.

The degree of openness to trade in the euro area does not, in fact, reflect the importance of each country's trade openness. The trade openness of the European countries taken separately is very largely explained by intra-European trade (Kirrane 1993). However, with monetary unification, the very high share of intra-zone trade flows in total European trade disappearing in favor of purely internal flows - invoiced and settled in euro -, the commercial opening of the zone is reduced, and this factor is no longer a decisive criterion for the internationalization of the euro. In fact, the demand for transactional balances of the euro must generally decrease (Kenen, 1993, Bénassy et al, 1993). By using the euro rather than European currencies, residents realize economies of scale in cash management for intra-zone trade. This drop in the cash request should not be offset by a symmetrical effect. In fact, an increase in the demand for transactional cash balances in euros can only occur if the invoicing and settlement of the euro exchanges are developed in the extra-European trade and between third countries. This remains hypothetical as long as we do not know the preferences of participants in world trade. This effect would in any case be weaker than the previous one. However, taking stock of the use of currencies in the invoicing of trade can provide some indication of the future internationalization of the euro.

The currency of a country is used for billing and settlement of trade flows with its partners. But this currency truly acquires the status of an international currency if it is used to label and regulate trade not involving the issuing country (Krugman, 1980, Chrystal, 1984, Black, 1991). A currency which succeeds in imposing itself as a third currency in the billing and settlement of trade has, moreover, every chance of maintaining this position. Even when the quality of the currency declines, for example due to a deterioration in the fundamentals of the country of origin, the currency remains in international transactions. The conditions that favored its accession are disconnected from its subsequent use, which is gradually becoming conventional (Aglietta, Deusy-Fournier, 1994). Inertia becomes stronger over time and becomes irreversible unless a sufficiently large shock modifies the exchange structure. The dominance and persistence of an international currency may ultimately be explained by all kinds of network externalities (Allen, 1993, Dowd, Greenaway, 1993, Matsuyama, Kiyotaki, Matsui, 1993, Le Quere, 1996). .

The share of European currencies in billing is far from negligible among the main exporters, but it is mainly due to the invoicing of intra-European trade. The share of the dollar in trade denomination (and the listing of primary goods) remains dominant, and it alone far exceeds the weight of the United States in world trade. Funke and Kenedy (1997) measure the coefficients of internationalization2 of the dollar and European currencies in 1980 and 1992: the former rose from 4.5 in 1980 to 3.6 in 1992, while the latter is equal to 1 , 0 for the two years concerned3. The decline of the dollar as the billing currency of world trade results less from a real disincentive for the dollar than from the effects of restructuring due to the smaller importance of oil-exporting countries in world trade (Bénassy, Deusy-Fournier, 1994). Since 1987, the share of the dollar in the billing of world trade has moreover stabilized.

It is difficult to estimate whether the invoicing of exchanges in euros can be brought to develop. If this were to be the case, the development of a commercial use of the euro would primarily concern the countries of Central and Eastern Europe, since the euro zone is their main trading partner. More generally, it is estimated that the role of the euro as a unit of account and a means of settlement in world trade may develop if prices are stable within the euro zone, if this area reaches a significant weight in the euro trade area and finally if the euro is an attractive currency for trading (Bénassy, Italianer, Pisani-Ferry, 1993 Bénassy 1997, Funke, Kennedy, 1997). This latter condition proves that the future use of the euro remains difficult to predict as it is true that defining the future preferences of exporters and importers remains perfectly uncertain. The US currency benefits from the advantage of the first entrant in the practices of world trade stakeholders. This allows them to capture positive externalities across the dollar. The use of the euro between third countries therefore seems improbable in the short term, as invoicing in euros does not make it possible to obtain such gains, in particular for the invoicing of homogeneous goods (Chrystal, 1978, Swoboda, 1968). The European Central Bank's (ECB) anti-inflation mission and the fact that the euro zone is the biggest exporter in the world (30% of world trade), however, favor the wider use of the euro for invoicing and settlement of exchanges.

In any case, billing practices have a secondary role in the internationalization of a currency. These practices hinder the process of moving from one international currency to another by inertia: they thus reinforce the use of the dominant currency (Kirrane 1993).

Exchange rate developments and official internationalization The analysis of the internationalization of currencies has generally invoked the need for a strong and stable currency. Regarding the character of strong money, we have indeed been able to highlight in the past a causal link between the internationalization of the pound and dollar and their appreciation. Accession to the status of international currency leads to an increase in the demand expressed in favor of the currency which is internationalizing, which tends to make it appreciate (Alogoskoufis, Portes, Rey, 1997).

In the case of the euro, it is customary to argue that this will necessarily be a strong currency, imitating the mark. The euro would necessarily be perceived as a strong currency because of the fiscal stability pact, and because of the independence and the determination of the ECB to limit inflation. Indeed, high or fluctuating inflation rates are accompanied by a variability in nominal exchange rates and lead to an increase in the cost of using money internationally. For this reason, a monetary policy aimed at limiting the level of domestic inflation would be a vector of internationalization (Tavlas, 1991, Hakkio, 1993) 4.

Patrick Artus (1997d) opposes the assertion of the assumption of an appreciation of the euro. The evolution of the external value of the euro certainly depends on the choice of monetary policy of the ECB, but also changes in demand for euros as an instrument of investment: the appreciation of the euro is thus also linked to its ability to attract investors in the long term (Kenen, 1993). On the one hand, it is difficult to decide the direction of monetary policy without knowing the objectives - internal or external - favored by the ECB. On the other hand, Artus demonstrates the difficulty of predicting the nature of international portfolio reorganizations5. In fact, the portfolio model presented predicts a slight long-term appreciation of the euro in the case of a relatively unrestrictive monetary policy of the ECB, the appreciation being all the stronger as the demand for euro securities from the rest of world increases. The model leads to the opposite of a long-term depreciation of the euro if the ECB does not intervene to stabilize its external value: and if there is exchange rate instability, demand from the rest of the world of securities in euros decreases especially if it is fueled by a decline in the reasons for diversification.

The external stability of money as a criterion for internationalization

A stronger stability of the external value of money and the possibility of predicting it are traditional vectors of internationalization. But the question of the relative stability of the euro is not settled (Kirrane 1996).

Some empirical studies estimate that the creation of a union monetary must give rise to greater exchange rate stability. Philippe Martin (1997) presents a model that mobilizes the link that can be established between the size difference of the different zones (Europe, Japan, United States) and the volatility of their exchange rate. The change in the relative size of the euro area before and after integration is the starting point for the analysis. The reduction in the number of stakeholders changes the exchange rate policies strategically. According to the model, the benefit of a country that changes its exchange rate to stabilize the economy in the event of a shock is all the greater as its size is small: a devaluation is followed by more effects (rising production) in a small country. Under these conditions, a shock produces significant exchange rate instability in small countries, and this instability is all the greater when the size gap between countries is high6. Philippe Martin applies this result to the evolution of the exchange rate of the euro against the dollar. The reduction in exchange rate volatility - on the dollar / European currencies and the dollar / euro - is all the more salient as the size of the euro zone is comparable to the United States, and the relative difference that prevailed before the integration is significantly reduced. The reduction of exchange rate volatility should therefore prevail.

Other observers come to the same conclusion. They considerable rent that the ECB can hardly do without a managing its exchange rate, at least in the short or medium term, for reasons of reputation and credibility, as well as the absence of prior indicators for the conduct of monetary policy. Exchange rate volatility would therefore be limited. In addition, and in a longer-term perspective, bodies such as the IMF favor the need for reflection by the euro zone, the United States and Japan to establish stable and coordinated international monetary relations. If such cooperation were put in place, it would lead to stabilize the exchange between players playing equal game: we find the argument of Philippe Martin (1997).

On the other hand, many authors (Artus, 1997b, Bergsten, 1997, Bénassy-Quéré, Mojon, Pisani-Ferry, 1997, Cohen, 1997) envisage the hypothesis of an increase in exchange rate volatility. The external value of the euro must be more volatile than that of European currencies, particularly because of the concentration of the ECB on internal objectives. In fact, the desire to stabilize the exchange rate makes more sense in an economy characterized by a high degree of openness that may fear an unfavorable evolution of its competitiveness. The desire for stabilization of the exchange evolves in the same direction as the degree of openness. In addition, the increase in integration may gradually lead to import substitution which further reduces trade flows with the non-euro area and reduces the degree of openness of the euro area accordingly. Under these conditions, the desire to stabilize the exchange rate of the euro is limited, resulting in a relative increase in the nominal volatility of the euro against European currencies before unification. For Bergsten (1997) and Cohen (1997), the euro zone would be led to adopt a policy of "soft negligence" comparable to that pursued by the United States in the past. Bénassy-Quéré, Mojon and Pisani-Ferry (1997), however, qualify the prospect of total "soft negligence". While it is true that the evolution of the parity of the euro can be less important with the vast majority of currencies, it may be desirable to single out the case of the yen and the dollar. Bénassy-Quéré et al. (1997) believe that the changeover to the euro will actually create more real volatility in exchange rates. They insist, however, that volatility will remain moderate. Without further deepening the question of the link between the changeover to the euro and its greater or lesser stability, it is clear that this indicator cannot be reliably used to anticipate the internationalization of the euro.

Official use of the euro and internationalization

In the event of increased variability in exchange rates, the impact will be more significant for economies active in world trade that have pegged their currencies to one of the three currencies. Their selection anchor to a currency like the euro is in any case decisive for accession to the status of international currency, as the official request for a currency influences demand private (Bénassy-Quéré, 1996, Bergsten, 1997). It is difficult to determine how the internationalization of currencies takes place through official use, but their use as a home currency for third currencies and the distribution of currencies in official reserves is generally used as an indicator (Kirrane 1993).

Anchorage and internationalization

The degree of internationalization of a currency would be related, in this perspective, to the number of currencies attached to it, hence the interest of empirical studies listing the anchoring currencies most commonly used for for purposes of attachment (Table 4). Despite the context of general currency float, the monetary authorities may retain either an official reference or a de facto attachment to anchor the external value of their currency. Frankel, Wei (1993), Bénassy, Deusy-Fournier (1994) and Bénassy-Quéré (1996) show - according to different methods - the existence of de facto stabilization efforts of the currencies of certain Asian countries, from Latin America or from Central and Eastern Europe. It is therefore as much an interest in real connecting at nominal attachment to properly understand the diets of existing factual exchange. The empirical work of Bénassy-Quéré (1996), based on the volatility of nominal exchange rates in relation to anchor currencies, shows that the de facto nominal currency anchor role is far from being threatened by floating. generalized currencies. Some re-composition has taken place, since fewer countries in Africa and the Middle East have been pegging their currency to the US dollar since 1974. In contrast, Asian countries have stabilized the external value of their currency by pegging to the dollar rather than in the yen at least until the financial crisis of 1997.

The ability of the euro gradually to acquire a role of anchor currency depends on several factors, foremost among which are the anchoring choices of the peripheral countries. In particular, these are countries wishing to integrate the new European exchange rate mechanism among the CEECs and the countries of the Mediterranean basin. Their choice of anchoring will depend mainly on the intensity of trade and capital exchanges with the euro area, the currency of denomination and the size of the external debt 7 and finally the degree of monetary coordination. It must be emphasized that the role of anchor money is subject to phenomena of inertia. In this perspective, the place occupied by the dollar in the wording of the external debt of these countries would strengthen its role permanently anchor currency.

It is clear that the degree of internationalization of the euro, driven by its role as a home currency, is difficult to predict. Even if the euro seems a logical recourse for some countries, nothing is assured in this area. Admittedly, these countries will consider the interest of joining the euro to stabilize their exchange with their main partner. On the other hand, a limitation of trade and finance from the area, too high transaction costs, questionable stability, or limited prospects for later integration into the area could limit the anchoring to the area euro, a fortiori for non-peripheral countries. This argument leads us to look at the predictable share of the euro in foreign exchange reserves.

The euro, official reserve currency

It is permissible to establish a link between the choice of official institutions for the denomination of foreign exchange assets and the internationalization of a currency. The official demand for euros represents a complementary factor to private demand. It depends largely on the choice of third country exchange rate regime. The accumulation of official reserves in a currency can, however, be disconnected from the choice of anchoring, since a third currency is held for official interventions.

The dollar's share of official foreign exchange reserves was 79 per cent in 1975; it reached 57% in 1997. This decline is not linear since the dollar's share has stabilized since the mid-1980s (Table 5). It is generally explained by the double movement of depreciation of the dollar and by effects of recomposition, reflecting the stronger representation of European countries holding marks (13.7% of reserves) or Asian countries holding yen (7.1 %) in total reserves held. The US dollar is thus by far the main official currency held by central banks. The share of the five European currencies, although rising, was in 1997 23% of the total reserves held.

What will be the place of the euro as the official reserve currency? If the request for official holdings mainly depends on the demand for central bank intervention patterns in the markets of exchange rates, the euro demand the official sector should follow the following evolution. Initially, it is likely to decrease due to the reduction in the reserve requirements of the euro area countries, on the grounds that central banks are no longer required to implement interventions to align the parities in the framework of the exchange (Kirrane 1996). Reserves in European currencies are no longer international reserves, but assets in the currency of the unified area. The remaining reserves would mainly consist of dollar assets. The ECB could seek to get rid of it, either because it has become useless or because it will opt for greater diversification of its reserves (Kenen, 1993, Benassy et al., 1993, Funke, Kennedy, 1997). Masson, Turtleboom, 1997).

As far as third countries are concerned, a gradual resetting of their reserves in favor of the euro is expected.

The incentive to hold more official reserves in euros must primarily concern countries peripheral to the euro area. For Masson, Turtleboom (1997), the central banks of other countries could, however, seek to hold more euros in a perspective of optimal diversification of their foreign exchange assets. In this case, the real stability of the euro becomes crucial. According to their projections for the optimum structure of the reserves, the request of the official sector could be greater at the request of assets in marks before the transition to the euro.

The first part of this work has shown the difficulty of establishing a precise link between the internationalization of the euro and the characteristics of the currency and the issuing economy. Focusing only on official internationalization, which would imply that the use of the euro develops as a connecting, intervention and denominational currency for foreign exchange assets, is still very uncertain as long as The effects of European monetary integration on the different exchange rate policies are not precisely known. Anticipating, on the other hand, that the internationalization of the euro may result from a development of its use as a currency of settlement and billing also seems insufficient. The internationalization of the euro can in no way come from the mere development of its use for billing and settlement of commercial transactions, because of the relative weakness of real transactions in relation to financial transactions. In fact, only a combined development of the euro as a means of international payment and denomination currency of the zone's financial assets is likely to lead to its internationalization. The interaction of the two, namely the development of financial transactions and the growing externalities of the use of the euro as a means of payment, is crucial (Alogoskoufis, Portes, Rey, 1997). That is why it is essential to take an interest in the question of international financial transactions, to address what the place of the euro might be in international portfolios.

INTEGRATED FINANCIAL MARKETS AND CAPITAL FLOWS AS VECTORS OF INTERNATIONALIZATION

The extent of the euro's internationalization prospects must be linked to its future share in international portfolios. Portfolio structure and capital flows are particularly influenced by the structural changes in the European financial markets brought about by the changeover to the euro. The unification of European financial markets is a means of increasing their liquidity, which can make the euro more attractive.

Structure of the financial markets and attractiveness of the euro The breadth and depth of the markets as well as the lack of regulation allow operators to easily carry out a large volume of transactions8. Non-residents seek to hold the currency that offers the most guarantees in terms of the efficiency and speed of the means of payment, the variety of available financial instruments or the dynamism of the banking system. The existence of broad and deep financial structures is therefore a key vector internationalization of a currency for financial transactions. Acquiring greater liquidity and market depth is essential, but may not be enough. "Volume" effects favor the maintenance of the dollar in certain market segments, as its use generates externalities. A partial loss of its dominant currency status has nonetheless occurred in some asset markets. To demonstrate this, the evolution of the share of different currencies by asset is a relevant indicator: it highlights the less important position of the dollar in outstanding securities.

Size and location of financial markets in euro

Monetary integration has to be accompanied by a greater financial integration, which tends to increase the size and change the location of financial activity from the zone to the main ones. places, in fact the most liquid. The adoption of the euro within a zone of eleven countries brings to light a financial market that brings it closer in size to that of the United States and Japan (Table 6). The size of the unified exchange market is comparable to that of the United States, but remains much lower than that of London, the first location for these transactions with $ 464 billion exchanged. In addition, the euro area's market capitalization stands at $ 1,933 billion, well below that of the United States (5,655) and Japan (3,545). If London had built area, the market capitalization was increased to 3280 billion. The non-participation of London decreases proportionally less the size of the domestic bond market in euros. Outstanding domestic bond debt reached $ 6,207 billion in the euro area, more than Japan (4,862), but less than the United States (11,292). The size of the international bond portfolio in the euro area is well above that of Japan and the United States. In total, the size of the unified euro market is not comparable with the sum of the domestic markets taken separately, but it is clear that the size of the euro's financial market would have been incomparably higher, and therefore more liquid and attractive, if the United Kingdom had participated in the unification given the size of the City.

Degree of integration of European markets and liquidity

The integration of financial markets within the euro area will be achieved gradually: it will not be immediate or homogeneous. Financial markets in euros will be juxtaposed without real integration before reaching a high degree of integration. Some markets will remain segmented, that is to say, they retain a connotation national. The argument of the size of European financial markets must therefore be qualified, at least in the medium term, as long as integration is not complete 9. Thus, the total liquidity of the European financial markets, founded for Prati and Schinasi (1997) on the "elimination of the exchange rate risk, the narrowing of the spreads and the convergence of market uses" is not guaranteed since 1999. .

The introduction of the TARGET payment system is a means of integrating the various money markets within the euro zone, which should encourage the emergence of a large and efficient interbank market. For some, this movement is necessarily accompanied by greater competition between banks, for wholesale activities, and a restructuring of the banking sector by bringing together to reach a critical size. Mac Cauley and White (1997) believe that the immediate impact of the changeover to the euro on banking activities is more limited than that affecting the securities market. On the other hand, deep restructuring will gradually and durably affect banking activities.

Financial integration needs to be faster in the short-term securities segment. Analyzes highlight the close relationship, prior to unification, between the name of the securities chosen and the nationality of the issuers. Segmentation was therefore closely linked to the coexistence of different national currencies. For this reason, some authors expect, as early as 1999, a development of the market of securities denominated in euros, boosted in particular by the predictable dynamism of the securities market of the States (Mac Cauley, White, 1997). The market for euro treasury bills issued by different sovereign issuers must prove to be deeper than the domestic currency bond markets taken separately, in particular with the issuance of various deadlines.

This also applies to longer-term issues. The conversion into euro of government bonds previously denominated in European national currencies creates a $ 5 trillion public debt market. However, in the absence of a single issuer of public debt, the unification of euro public debt markets is likely not to lead to full integration. Since the various public securities are not perfectly substitutable, a certain segmentation of the market persists. In fact, the differences in performance can be explained by both currency, signature and liquidity risks. The disappearance of the foreign exchange risk which explained, before the euro, most of the spreads should give more prominence to the risk of signing. Bond issues are therefore characterized by yield spreads reflecting the hierarchy of signature risk of sovereign states, market liquidity and the pace of issuance. They could reach twenty-five basis points according to certain estimates. Overall, the integration of the public debt markets will not be complete for all maturities.

Private bond markets need to be more liquid and diversified than before unification. However, their integration can not be immediate, due to tax disparities and the weakness in Europe of the 45 institutional investors (Artus, 1996). In the face of limited demand - historically through the use of intermediated financing10 - private equity issuance in Europe remains limited compared to private bond markets in Japan and the United States. In addition, private borrowers mainly issue securities in domestic markets. However, the private bond market may be stimulated by the development of stronger integration of the government bond market and by non-resident issues.

Although it is facilitated by greater comparability of asset prices, the expected integration in equity markets - with a strong domestic connotation - is therefore likely to be imperfect and should primarily concern European-sized companies as a first step. . This integration could be achieved as part of the plan to create a pan-European stock exchange listing the 300 largest capitalisations11. National stock exchanges would, in this case, maintain the listing of smaller companies. The expected competition on the various regulated markets for euro derivatives is already particularly striking between places. The competition between MATIF, LIFFE and DTB is exercised at least remaining on the contracts of individual national stock indexes or the raw materials on the futures interest rate products which concentration is emerging very rapidly.

Without further developing these issues, it is clear that the structures of the European financial markets are largely affected by the adoption of the euro, although full harmonization can not be envisaged. The degree of integration of the financial markets varies from one compartment to another, but even if initially imperfect, the integration of the European financial markets is a decisive factor for the internationalization of the euro.

Portfolio Structure and Internationalization of the Euro We have identified the acquisition of greater liquidity and depth of the euro area markets as a key driver of its internationalization. This increasing liquidity will gradually become apparent given the initial segmentation of certain markets, but for Prati and Schinasi (1997), segmentation will tend to decrease with the intensification of capital exchanges between the euro area and the rest of the world. Financial flows in euros are therefore essential to create the conditions for its internationalization. The intensification of capital flows could, at the same time, be limited by greater exchange variability between the euro and other reserve currencies (Artus, 1997d).

Predictable share of the euro by market segment

To find out the share of the euro as an international means of payment, one generally refers to the structure of the foreign exchange market.

The dominance of the dollar on the exchange markets and the role of volume effects

Foreign exchange transactions illustrate how the use of a currency in international transactions is conditioned by a range of externalities (Aglietta, Deusy-Fournier, 1994, Le Quéré, 1996).

The more a currency is used, the lower its transaction costs, which gradually tends to lower spreads. These transaction costs are low in percentage, but because they involve high volumes, they become quite strategic. Externalities from returns to scale and network effects gradually contribute to the sustainability of the dominant position of the dollar: the inertia of positions acquired is particularly sensitive in the foreign exchange market.

Alogoskoufis, Rey and Portes (1997) estimate that the decline in the transaction costs of the euro will be all the more rapid as financial markets become deeper and more liquid: "An efficient domestic financial market encourages capital inflows that increase the liquidity of the bilateral exchange markets involving the domestic currency, which increases its probability of becoming a vehicular currency ".

Conversely, the acquisition of vehicular currency status, increasing liquidity in the currency markets, reduces costs of substitution between asset portfolios. In other words, the euro can be internationalized by the combination of a greater attractiveness of assets in euros and lower transaction costs on foreign exchange markets. The development of transactions on the financial and exchange markets creates synergy phenomena that facilitate the use of the euro as a vehicular currency, beyond a critical size of transactions. The demand for euro-denominated financial assets affects foreign exchange market transactions and increases liquidity in both markets. The emergence of the euro as a vehicle currency would therefore be based on euro / yen and euro / dollar transaction costs comparable to transaction costs involving the dollar. The price differences on financial assets in euros must be close to those prevailing for the dollar, which are naturally much lower than those of assets denominated in other currencies. This finding singularly limits the replacement of the dollar by the euro as an international currency (Alogoskoufis, Portes and Rey, 1997). However, the euro will actually reduce the dominance of the US dollar as an investment currency when the integration will deepen and limit transaction costson financial flows, hence the interest in assessing the degree of integration of the financial markets.

The erosion of the dollar in other market segments and the outlook for the euro

The dollar has lost part of its role as a reserve currency for private transactions (Bénassy, Deusy-Fournier, 1994). However, the attractiveness of agents for other currencies has been mitigated by the existence of swaps that offer the possibility of converting a bond issue denominated in any currency into dollars. The dollar remains the dominant currency for all funds raised on the international capital markets, but its share has eroded in 15 years: it went from 76.2% to 54.4% between 1980 and 1996 for securities issues and bank credit. For international securities issues alone, the dollar's share rose to 43.5% in 1996. At the same time, capital raised in yen rose over the period (from 1.6% to 7.5%), while The share of European currencies increased from 12% to 25.6% between 1980 and 1996 for the total funds raised, and from 27.9% to 28.5% for international securities issues. In addition, the share of European currencies in the external assets of banks has steadily increased over the last fifteen years, as shown in Table 9. The yen's share has benefited less from the erosion of the dollar. , which may seem paradoxical if one takes into account the dynamism of the activity of Japanese banks (Bénassy-Quéré, 1996).

The place of the euro as an investment instrument could therefore develop with the growing integration of the monetary and financial markets in Europe. The greater liquidity of the euro markets could stimulate financial flows and thus favor the internationalization of the euro. Is this effect certain? Will the size acquired by the unified financial markets be enough to induce an increased internationalization of the euro given its use in the naming of financial assets?

Developments in international supply and demand for euro-securities

Mac Cauley and White (1997) predict a substantial increase in euro-denominated private equity issuance to the point that rising corporate issuance could undermine current market dominance state funds in Europe. Issuers tend to compare the cost of bank loans with bond issues, commercial paper or bonds, and possibly to prefer thisfinanced. At the same time, resident investors will have greater access to the euro-denominated broadcasts of a large number of issuers, whether or not they are of the same nationality, which broadens the range of investment opportunities. MacCauley and White (1997) argue that, if true, the tendency for agents to move away from intermediated financing should prove to be very unfavorable for banks already in a situation of increased competition. An increase in the supply of private securities and a growing importance given to the risk of signing are not to be excluded. In these circumstances, private capital flows would play a major role in the possible internationalization of the euro (IMF Survey, 1997).

It is not excluded that investors in the euro area continue to favor national titles emissions which would limit the integration of the securities market across the region. If not, resident investors would be led to further diversify their portfolios of assets within the zone. In fact, Patrick Artus (1996) expects an increase in intra-zone diversification, hitherto limited by exposure to currency risk. The degree of international diversification of continental investors is, moreover, lower than that of other regions, although within each bloc there is a similar tendency to favor local financial assets. In 1990, the degree of international diversification of US institutional investors is certainly limited to 4% for insurance companies and 3.8% for pension funds. On the other hand, it is much higher in the United Kingdom (12.5% for pension funds and 16.8% for insurance companies) and Japan (respectively 14.2% and 7.9%). Institutional investors in Germany and France retain a mainly domestic component in their portfolios, with a degree of diversification of 2% for insurance companies and 4% for pension funds in France, compared to 0.7% and 0% respectively. , 8% for Germany, which is particularly low. In addition, Patrick Artus notes that the institutional investors' share of the total holding of assets in Continental Europe is modest: 21.5% in Germany and 13.2% in France, while the shares are 55%. , 8%, 29.8% and 78.5% for the United States, Japan and the United Kingdom. The changeover to the euro must change investor behavior in the direction of a correspondingly higher demand for non-domestic euro securities.

Can an increase in private issues find investment demand on the non-resident side? On the one hand, non-euro area residents are likely to be attracted by the greater liquidity and depth of the euro securities market, compared to what has been observed so far for European currencies. . Large international investors may be forced to reallocate their portfolios in favor of the euro, especially if it allows them to benefit from greater diversification relative to dollar securities. The reallocation of portfolios in favor of the euro will be all the stronger as there is a limited correlation of returns between US securities and euro area securities12. On the other hand, Funke and Kennedy (1997) and Artus (1997d) note that the changeover to the euro will precisely reduce the diversification possibilities of international investors. The hypothesis of a greater demand for assets by non-residents is therefore questionable whether, with several national currencies, investors enjoyed arbitrage opportunities between higher yields. A comparison of the yield and risk of securities issued in the euro area relative to securities issued outside the euro area yields results that are not necessarily favorable to an increase in the demand for euro securities by non-residents, as it would require a higher return or lower risk compared to holding dollar securities. In fact, the excess return of euro-denominated securities over dollar-denominated securities cannot be obtained if the ECB chooses to conduct accommodative monetary policy, driving down interest rates within the zone. In addition, the demand for securities cannot be stimulated by a greater risk attached to the holding of these securities. However, we have pointed out the higher risk of holding non-resident euro securities in the event of higher exchange rate volatility. If exchange rates actually become volatile, then the demand for European securities will shrink from that prevailing before unification. Moreover, contrary to Mac Cauley and White (1997), Artus (1997c) expects the net offer of euro securities to non-residents to be extremely limited. Patrick Artus remarks that a currency that acquires the status of reserve currency leads investors to ask for unlimited amounts of assets denominated in this currency, which offers the issuer country opportunities to finance its external debt without additional yield. This sense only makes insofar as the issuing country does indeed have a balance of payments deficit. As the euro zone is characterized by a structural surplus, the supply of securities in euros must therefore be low. In these circumstances, limited supply does not satisfy the demand from non-resident investors (Kirrane 1993). The internationalization of the euro can only occur in the presence of an accumulation of balance of payments deficits in the euro area: it is therefore uncertain.

In addition, the difficulty of assessing the effects of the adoption of the euro on the supply and demand of assets calls into question the commonly expressed argument, which assumes - for given issuers of the issuers of the zone - that attractiveness of non-resident investors would lead to an appreciation of the euro. Alogoskoufis, Portes and Rey (1997) estimate that the demand for euro assets by private investors, combined with a recomposition of official reserves in favor of the euro, should be higher than new issues in euros. This trend is based on a net demand for euro assets favoring the appreciation of the euro against other currencies. However, the assumption of an appreciation based on an increase in the net international demand for securities in euros is by no means assured (Mac Cauley, White, 1997), since the attraction for the European markets could also be accompanied by an increase in euro issues by non-residents. A development emissions of euro securities by large private and public debt managers - particularly in emerging economies - could happen while these entities generally prefer to denominate their emissions dollar given the depth of the US dollar securities market and low transaction costs. As a result, the growth of issues in euros, which is an alternative currency to the dollar, would not lead to its appreciation since we would see both an increase in the demand for euro securities and an increase in issues.

The total effect of creating a unified area in Europe is therefore difficult to determine. Some analysts believe that the Eurozone will attract mainly international issuers, while others believe that it will attract more international investors (Kirrane 1994). Stakeholder behavior is all the more unpredictable as the future of the euro remains difficult to pin down, be it its greater volatility or its tendency to appreciate against other currencies.

The determinants of the internationalization of the euro presented in the first part have in common that they tend more to accompany the process than to provoke the emergence of the euro as an international currency. The search for the factor causing an extension of the uses of the euro has led us to focus more on the integration of financial markets in euros in a context where financial flows take on a singular importance. The liquidity and depth of these markets could in this sense play a decisive role in encouraging the emergence of the euro as an investment currency.

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