

The Internationalization of Austria's Financial Sector since Accession to the European Union

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Since the mid-1990s, Austria and many other industrialized countries have experienced massive growth in their external asset and liability positions. However, Austria's high degree of real economic integration due to its position as a small, open economy only partly explains this development. Autonomous financial transactions, effected independently of external trade financing from a profit motive, are increasingly determining cross-border movements of capital. Legal measures adopted in the run-up to Austria's accession to the EU (e.g. the full liberalization of the Austrian financial sector) favored this development, as did the country's participation in Economic and Monetary Union (EMU). In terms of the rate of internationalization, Austria has as high a degree of financial integration as Finland and Sweden. However, it lags well behind Switzerland or the Netherlands in this respect. In terms of GDP, foreign equity holdings are on a far smaller scale in Austria than in these countries. Austrian securities investors prefer foreign debt investments. The euro area is Austria's most important investment and financing region – especially for securities. In the 10-year observation period, Austria's net income from foreign investments is in line with the European average.

1 Reasons for Austria's Financial Integration

As a small open economy, generating a sizeable portion of added value from exports and largely dependent on imports as well, Austria has traditionally been closely associated with other economic areas. In parallel, substantial cross-border financial transactions are processed to finance those exports and imports. However, Austria's growing real economic integration into the European economic union only partly explains the massive growth in Austria's cross-border asset and liability positions observed in the last ten years. The disproportionately strong surge in cross-border Austrian financial flows compared with transactions in goods and services reflects a growing dichotomy of cross-border financial transactions and current account transactions. The reasons for this can be found in the massive increase in autonomous movements of capital, i.e. financial transactions that are effected independently of transactions in goods and services. This development, also visible in most other industrialized countries, is well reflected in global foreign exchange trade, which is currently equivalent to several times the total turnover of trading transactions. According to the latest calculations by the BIS (2005), daily foreign exchange turnover in 2004 amounted to some USD 1,900

billion. This means foreign exchange markets move as much capital in about four days as world trade as a whole does in a single year (approximately USD 8,000 billion, WTO, 2004). According to Oberndorfer (2003), capital movements have increasingly outgrown their role of accompanying trade. Furthermore, Lane et al. (2003) substantiate the disproportionately strong rise in international financial flows compared with the degree of real integration. The main reasons for this development are outlined below.

1.1 Liberalization, EMU and Technical Progress – Driving Forces for the Internationalization of Austria's Financial Sector

The liberalization of the financial sector in Austria and other industrialized countries led to a dramatic dismantling of cross-border barriers to investment, thus favoring outward financial investment. According to the allocation efficiency theory, the weighting of a country in the portfolio of investors in a global financial market (less all transaction and information costs) is, as a rule, roughly equivalent to the country's relative importance in the world economy (Utzig, 2003). As a result, a small economy like Austria will play a small role in the investment decisions of both domestic and foreign investors. In the real world, however, regulatory barriers

Refereed by
Benedikt Braumann, IMF.

ers and information costs provide obstacles to cross-border financial flows, as a result of which investors tend to prefer domestic investment alternatives. Disproportionately high equity investment at home (equity home bias) has in fact been empirically proven for a number of countries (Lewis, 1999). The deregulation of the Austrian financial sector initiated at the end of the 1970s led to a convergence to this ideal situation, triggering portfolio shifts in favor of foreign investment alternatives. To pave the way for Austria's forthcoming accession to the EU, the liberalization of capital movements was concluded in as early as 1991. Austria's imminent adoption of the EU's *acquis communautaire* made it necessary to adjust Austrian financial law, enabling, for instance, foreign banks to enter the Austrian market from 1994. EU accession therefore achieved two things: it opened up the Austrian market to foreign banks and fueled domestic banks' cross-border business, rapidly accelerating the internationalization of Austria's financial sector. At the same time, mergers within the country's banking sector resulting from the privatization of most Austrian nationalized banks triggered considerably fiercer competition (Braumann, 2002). From the financial sector's perspective, therefore, Austria's accession to the EU created, above all, the legal framework necessary for internationalization.

One of the most important reasons for the surge in cross-border financial flows in the past decade was the introduction of the euro in 1999. For investors in the euro area, this meant the end of exchange rate risks and hedging costs – until then, one of the biggest

barriers to financial transactions between the countries participating in monetary union. In addition, investors whom legal restrictions had prevented from making foreign currency investments now enjoyed a far wider range of diversification options. Furthermore, an extremely high degree of transparency was created for international investors, as financial products were now denominated in a single currency and were thus comparable across countries. At the same time, the constant innovation of structured financial products broadened the spectrum of investment opportunities for international investors both in Austria and abroad.

Finally, the growing mobility of cross-border capital was also driven by technical progress in the area of international payments. One of the catalysts of this development was the TARGET¹ platform linking up the EU countries' national large-value payment systems, created in order to remove technical obstacles between these systems, to cut European payment costs and to speed up payment processing. However, national payment systems in Europe are still extremely fragmented (Association of German Banks, 2003). Moreover, the improvement of securities settlement systems, which dramatically fueled cross-border securities business, is also worth highlighting. Straight-through processing in trading platforms such as Xetra guarantees the fastest possible execution and cuts transaction costs thanks to the discontinuation of brokerage fees and to the generation of economies of scale resulting from these systems' growing widespread acceptance (Deutsche Börse, 2000).

¹ *Trans-European Automated Real-time Gross settlement Express Transfer.*

1.2 International Financial Flows – Consequence or Cause of External Trade?

The aforementioned correlation between external trade transactions and financial flows is also important for assessing cross-border financial assets when this correlation is reversed. Accordingly, one might argue that external trade does not generate commensurate capital flows for its own financing. Instead, it is itself the *result* of cross-border financial flows. In particular, cross-border trade investments can be conceived as a *cause* of real transactions in the form of trade with affiliated enterprises resulting from an existing direct investment relationship. This prompts the question (still to be definitively clarified in economic literature) as to whether a complementary or substitutive relationship exists between external trade flows and direct investment (Bellak, 1993). On the one hand, additional exports (e.g. in form of intermediate goods) to the direct investment's target region would suggest a positive correlation between foreign direct investment (FDI) and external trade. Accordingly, outward FDI increases total exports and creates additional employment in the domestic export sector. On the other hand, the converse case of outward FDI crowding out exports is also conceivable. In this instance, external markets are no longer serviced by the export of goods and services, but by the outsourced production of the direct investment's target company at local level. For the domestic export sector, this development would be associated with negative employment effects. At a pinch, even a reduction in total net exports due to reimports may be conceivable (Henneberger et al., 2001). Pfaffermayr (1995) carried

out an empirical analysis of this correlation for Austria.

2 Measurement of Financial Integration

Indicators for measuring financial integration can be basically classified into two groups (Lemmen, 1998).

Quantity-based measures (quantity approach) are based on cross-border transactions or asset positions that are standardized by a common reference measure (e.g. GDP). Increases in cross-border stocks or flows can be used as an indicator for deepening financial integration over time. In addition, the Feldstein-Horioka approach, which examines the correlation between cross-border investment and saving, can also be included in this group of indicators in principle (Obstfeld et al., 2004). This study will analyze the quantity approach in detail.

Price-based measures focus on discrepancies in prices or returns on assets caused by the geographic origin of the assets. The law of one price states that comparable assets must be identically priced if financial integration is fully complete. Accordingly, any discrepancies in prices or returns within this group of assets indicate nonintegrated markets. A detailed analysis of this approach with regard to the integration of both European money and capital markets can be found in Baele et al. (2004). In addition, it is worth highlighting the work carried out by Adam et al. (2002), who analyze European financial integration using the following categories: "credit and debt markets," "equity markets," "behavior of households and enterprises" and "institutional differences."

This study will measure financial integration based on the concept of the rate of internationalization. This

will entail relating the sum of external asset and liability positions of a specific reporting date to GDP, thereby facilitating both longitudinal and cross-section analyses. Whereas flows often trend erratically and are thus suited to the analysis of longer periods only to a limited extent, stocks offer the advantage of a more even development over time compared with flow measures drawn from balance of payments statistics. Stocks also take account of transaction-related changes and both price and exchange rate effects, not to mention other changes in stocks, such as depreciation.

The rate of internationalization (*INT*) at time *t* is derived from

$$INT_t = \frac{A_t + L_t}{BIP_t}$$

$$A_t = DI_t^A + PI_t^A + SI_t^A + FD_t^A + FR_t^A$$

$$L_t = DI_t^P + PI_t^P + SI_t^P + FD_t^P$$

According to IMF convention, the following aggregates are used on both the assets (*A*) and liabilities (*L*) sides of the balance sheet (see IMF, 1993):

DI = direct investment (equity and credit transactions between investors), *PI* = portfolio investment (money and capital market instruments as well as equity securities), *SI* = other investment (in particular, loans and deposits), *FD* = financial derivatives, *FR* = foreign reserve assets (only assets).

A slight weakness in this measurement concept is that the addition of assets and liabilities in individual cases means the same transaction is included twice in the rate of internationalization – contrary to its economic relevance. For instance, the issuance of an Austrian bond abroad increases both liabilities and assets (if the settlement account used to process the issue is also held abroad). However, inexactitude of

this kind in measuring the degree of internationalization is caused only by transactions that fall close to the reporting date and are thus limited to individual cases. As a result, the analysis of longer periods is not adversely affected.

3 Internationalization of the Financial Sector Over Time

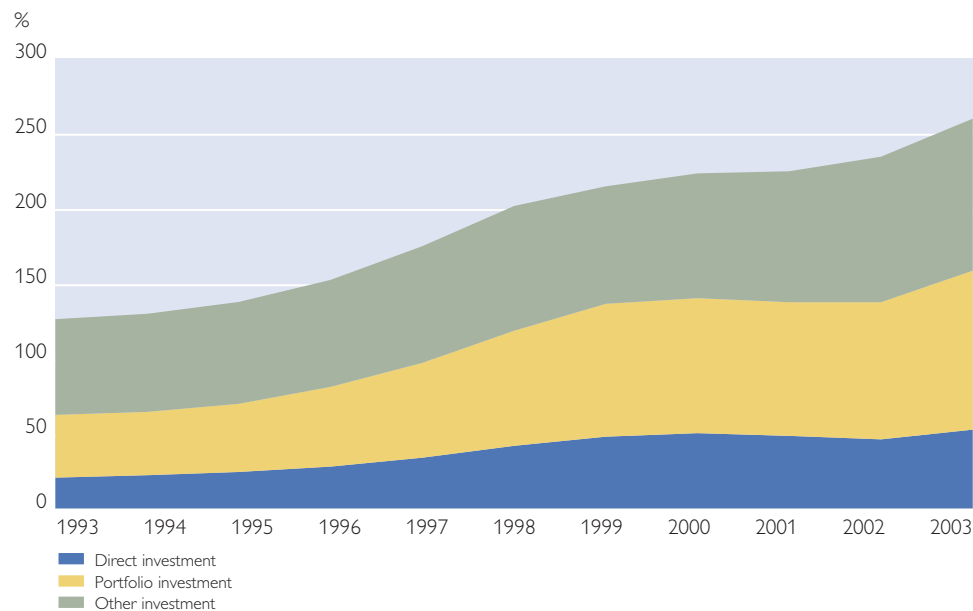
In terms of GDP, cross-border financial assets and liabilities of the industrialized world doubled from 1993 to 2003. In 2003, the internationalization rate of the industrialized countries shown in chart 1 totaled almost 260% of GDP in 2003. Since 1993, financial integration has grown steadily, peaking at an average growth rate of 20 percentage points in both 1998 and 1999. This development reflects two factors: first, transaction-related growth in cross-border assets in the run-up to the creation of the euro area and, second, valuation effects arising from the world stock market boom. Only the price setback in international financial markets, commencing in 2000, markedly dampened this trend. Since 1993, international securities investment has posted the strongest growth relative to GDP (+64 percentage points), followed by other investment comprising, primarily, cross-border loans and deposits (+37 percentage points) and by direct investment (+32 percentage points).

In addition, data for Austria suggest an equivalent trend (chart 2). Since 1995 (146%), the rate of internationalization has risen by slightly less than two and half times to 362% (2003). After cross-border asset positions had almost stagnated between 1993 and 1996, a marked growth phase commenced in the years thereafter, peaking finally at 59 percentage points in 2000.

Chart 1

Global Trends in Cross-Border Financial Assets

Total assets and liabilities of selected industrialized countries¹⁾ in terms of cumulated GDP



Source: IMF (International Financial Statistics).

¹⁾ Belgium, Germany, France, Finland, Italy, Japan, Netherlands, Austria, Switzerland, Spain, Sweden, United Kingdom and U.S.A.

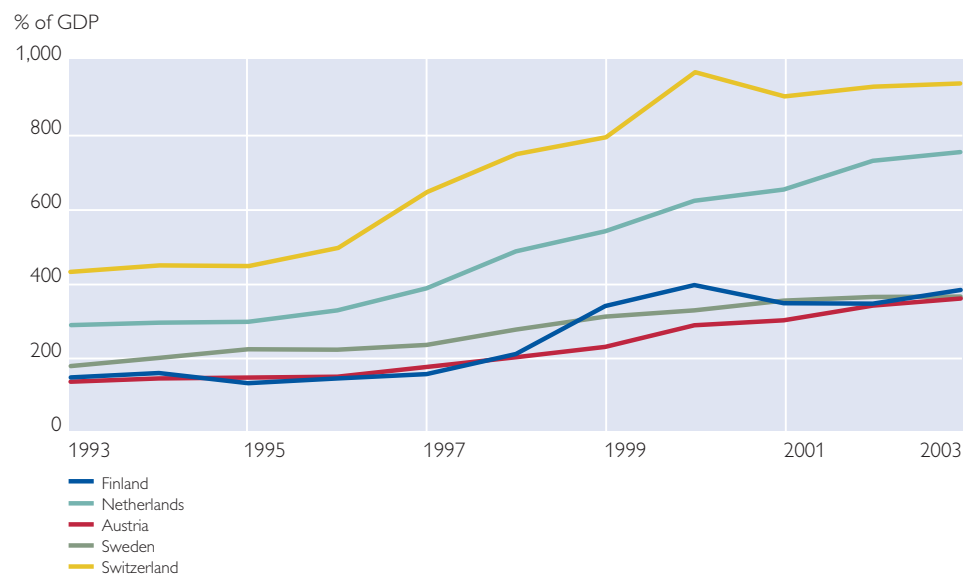
This study will also compare Austria's financial integration with that of Finland, Sweden, the Netherlands and Switzerland. Finland and Sweden

are of particular interest, as both these countries joined the EU at the same time as Austria. Finland, moreover, also joined the euro area at the same

Chart 2

Trend in the Rate of Internationalization

Assets and liabilities



Source: IMF (International Financial Statistics).

time as Austria while Sweden's participation in the Exchange Rate Mechanism II ensured that its currency was closely pegged to the euro. As a small export-oriented EU economy and member of the euro area, the Netherlands are also suitable for comparison with Austria. Finally, Switzerland as a non-EU Member State is also included in this analysis, although the Swiss financial sector's peculiarity – think only of its special role in connection with holding companies – limits comparability. Despite Switzerland's formal status as a non-EU Member State, however, both its real economy and financial sector are closely integrated into the EU's internal market by numerous association treaties.

The performance of Austria's external assets and liabilities is comparable with both Sweden's and Finland's in terms of level and fluctuation.

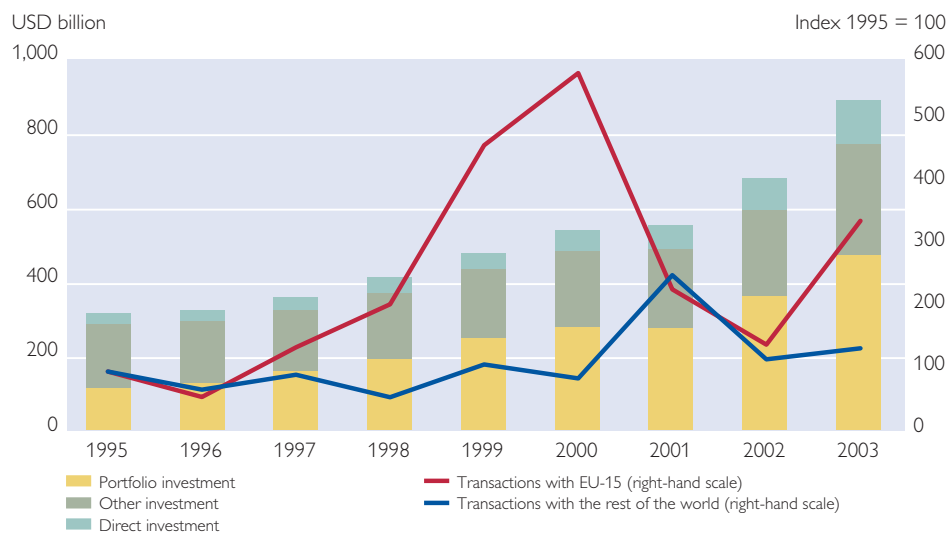
Until 1997, all three countries recorded merely modest increases in the rate of internationalization. In 1998 the rate started to accelerate sharply, particularly in Finland. By

2002, however, Finland's rate of internationalization had converged to that of Austria and Sweden. Switzerland and the Netherlands both had far higher rates. Starting from 434% in 1993, the Swiss rate of internationalization temporarily rose to almost ten times GDP in 2000. At 760% of GDP, the Dutch financial sector in 2003 was also far more closely integrated internationally than its Austrian counterpart.

The importance of EU membership for the degree of the Austrian financial sector's internationalization is evident from the regional breakdown of financial flows (chart 3) that, unlike stocks, are adjusted for valuation effects. Between 1997 and 2000, the transactions with the EU-15 (index values based on 1995) show a dramatic surge in cross-border capital transactions. By contrast, only weak growth was posted with the rest of the world. Given Austria's bleak real economic and financial environment, the temporary slump of the index in 2001 can be basically understood. Furthermore, the diametrically opposed trend in

Chart 3

Structure of Austria's External Assets and Liabilities



Source: IMF (International Financial Statistics); OeNB calculations.

transactions with the rest of the world in 2001 (the causes of which would be better determined in a separate study) appears to be of interest.

A breakdown of cross-border assets by both investment and financial instruments shows securities to be a key growth factor for Austria. Whereas external asset and liability positions almost tripled to a total of about USD 900 billion in the period from 1995 to 2003, portfolio investment grew by more than fourfold over the same period.

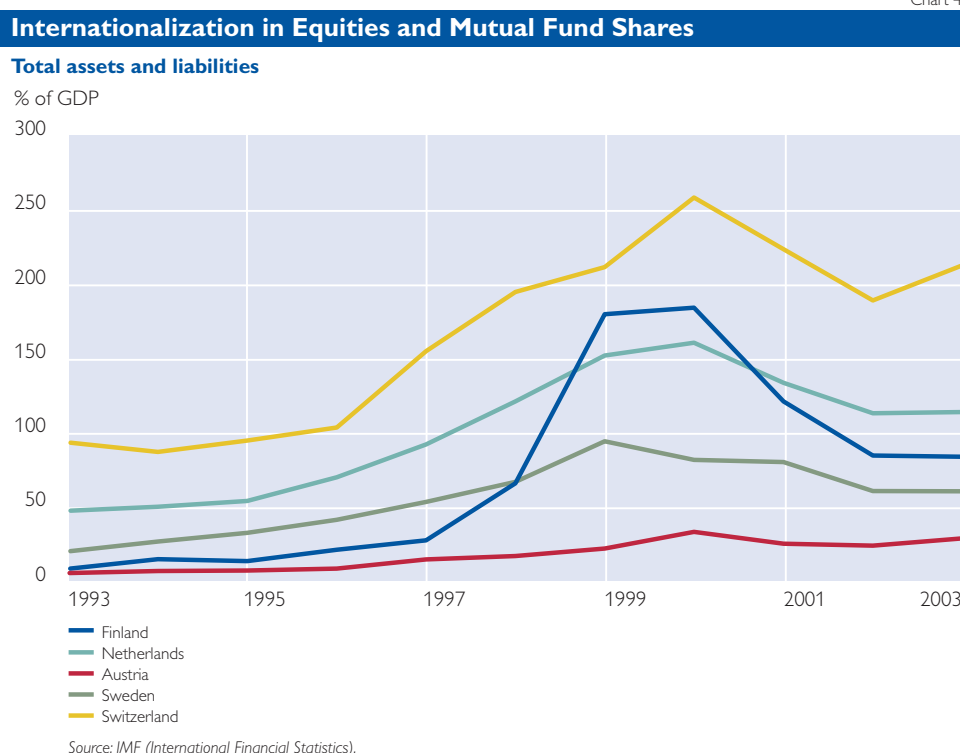
3.1 Conservative Investment Tempers Stock Market Turmoil

The global boom in equities at the end of the 1990s seems to have left Austria largely untouched. Whereas, for instance, Finland's cross-border positions in foreign equity securities (equities and mutual fund shares) at end-1999 were 15 times the levels of 1995

on both sides of the balance sheet, they increased by only a slight margin in Austria (chart 4). In addition, the Netherlands and Switzerland posted dynamic growth similar to Finland's, which was also at a far higher level. Contrary to the international trend, Austrian securities investors preferred debt securities to equity securities in the entire observation period from 1993 to 2003 and thus participated in the equities boom at the end of the 1990s to a relatively small extent. The average share of Austrian equities and mutual fund shares as a percentage of total external securities-based assets was only 14%. In the same period, the equivalent in Sweden, the Netherlands and Finland was 60%, 56% and 44%, respectively. As for Switzerland, investment in equity securities accounted for 61% of external assets.

The marked lag in Austrian cross-border equities business seems to be

Chart 4



the logical consequence of the country's generally low-key equities culture, affecting both domestic and international capital markets in equal measure. This situation may be due to the Vienna exchange's low market capitalization by international standards, largely preventing international investors from investing across a broad front in Austria. The structure of Austria's economy, which is marked by small and medium-sized enterprises (SMEs), seriously restricts the number of enterprises that can be considered for public bond issues.² Furthermore, the importance of equities as an investment instrument is determined essentially by the structure of the pension insurance system. Pay-as-you-go systems (such as Austria's) provide far less liquidity to invest in securities than funded pension systems (Waschiczek et al., 2000). Although the unequal tax treatment of equity and debt (since, unlike the return on equity, the return on debt can be claimed as expenses) makes the basic preference for debt financing appear plausible, it is not peculiar to Austria and so does not explain the country's below-average proportion of stocks.

Austrian investors' conservative investment strategy had a beneficial impact during the stock market slump in the period from 2000 to 2002, which eroded Austrian external assets to a far lesser extent (largely for valuation reasons) than those of peer group countries. For instance, whereas Finnish asset and liabilities positions in cross-border equity securities were halved, Austria suffered only slightly less than a 25% decline over the same period.

3.2 Growing Influence of Bonds on Austrian Banks' Cross-Border Financial Operations

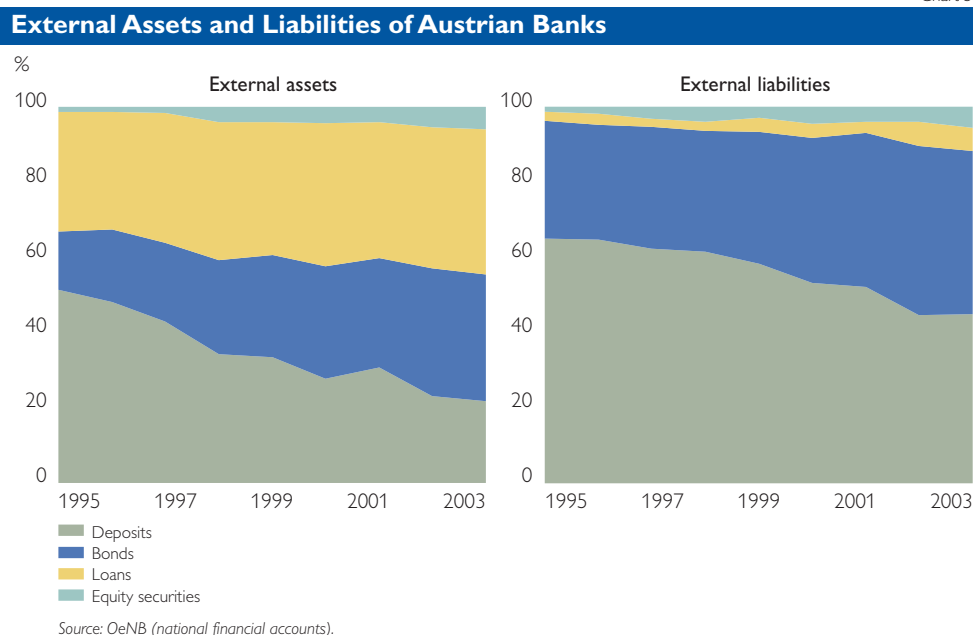
As expected, a sectoral analysis of Austrian external assets and liabilities shows financial corporations (particularly, banks but also insurance companies and pension funds) to be the leading actors in cross-border transactions. In the period of 1995 to 2003, this sector's share accounted for around 80% of total external assets and almost 60% of total external liabilities. It is plain to see from the portfolio structure of banks that although deposit banking remains vitally important on both sides of the balance sheet, in the past few years debt securities have quickly gained ground to the detriment of deposit banking on both sides as well (chart 5). Since 1995, the share of bonds has doubled to 20% of total assets, with financing from this instrument climbing from 24% to almost 30%.

This substitution effect in the structure of bank balance sheets highlights the growing transformation of banks from purely financial intermediaries, focusing on deposit banking and lending business, to actors in capital markets who are active for both own account and account of a third party and are thus increasingly assuming a sales role. The convergence of European bond markets, fueled particularly by the introduction of the euro (indeed, as early as in the run-up thereof), considerably enhanced the importance of these financing and investment instruments. For nonfinancial corporations, corporate bonds in the past few years have increasingly acted as an alternative to borrowing³.

² The legal structure of stock corporations is associated with stringent structural requirements, which are binding on this type of corporation. Stock market flotations also incur high fixed costs.

³ However, bond and loan financing are significantly different in terms of costs and rating requirements and can therefore be substituted only to a limited extent (Deutsche Bundesbank, 2004).

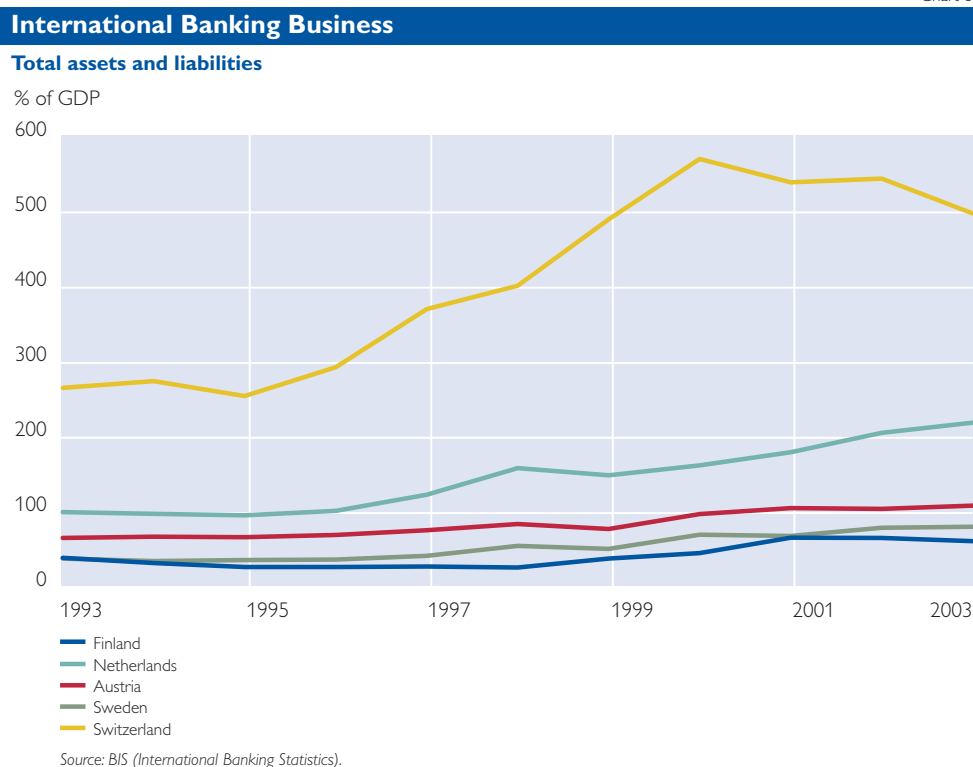
Chart 5



In addition, the transparency of the European bond market has dramatically improved thanks to the growing involvement of rating agencies in Europe in the last few years.

Chart 6 shows Austrian banks' international business to be trending in the middle range, compared with Finland, Sweden and the Netherlands. In terms of GDP, the share of banks'

Chart 6



cross-border financial assets and liabilities increased by only a tiny margin in Austria and Scandinavia in the period from 1993 to 2003. As for Switzerland, the predominant position enjoyed by its banks, which are far more closely integrated with international markets, is especially plain to see. Since 1995, in particular, Swiss banks' external asset and liability positions have firmed significantly, peaking at around 570% of GDP in 2000. Despite the fact that Switzerland is not an EU member, the financial integration of Swiss banks has been successful not least for this reason, as the country had already attained a preeminent position in competing for international funds long before 1995.

Apart from banks, other sectors play a relatively minor role in Austrian cross-border financial operations. On average, corporate assets and liabilities accounted for 17% and 13% of total stocks, respectively. Equity securities (some 60%) were on average the leading type of cross-border investment and financing for this sector over the observation period. By contrast, bonds were important only on the financing front (21%). In addition, securities (in particular, equities) mostly accounted for households' external financial assets. All in all, however, total cross-border investment by households was too low to appreciably influence the share of equities as a percentage of total Austrian assets.

3.3 Euro Area – By Far the Most Important Investment and Financing Region for Austrian Investors

In the past few years, Austrian financial investors have been increasingly

switching their focus of investment to the euro area. Whereas today's euro area countries held only a third of all Austrian external assets in 1997, in 1999 this share amounted to 40% and almost 50% at the end of 2003 (chart 7). At the same time, the euro area has become steadily (albeit only slightly) less important for Austrian external trade. In 1995, this region accounted for 61% of Austrian external trade based on total imports and exports. In 2003, by contrast, the euro area accounted for only 57%. As for the EU-15, its share declined by as much as 6% from 76% to 70%. The dichotomy between financial markets and real transactions (see above) can therefore also be substantiated at a regional level.

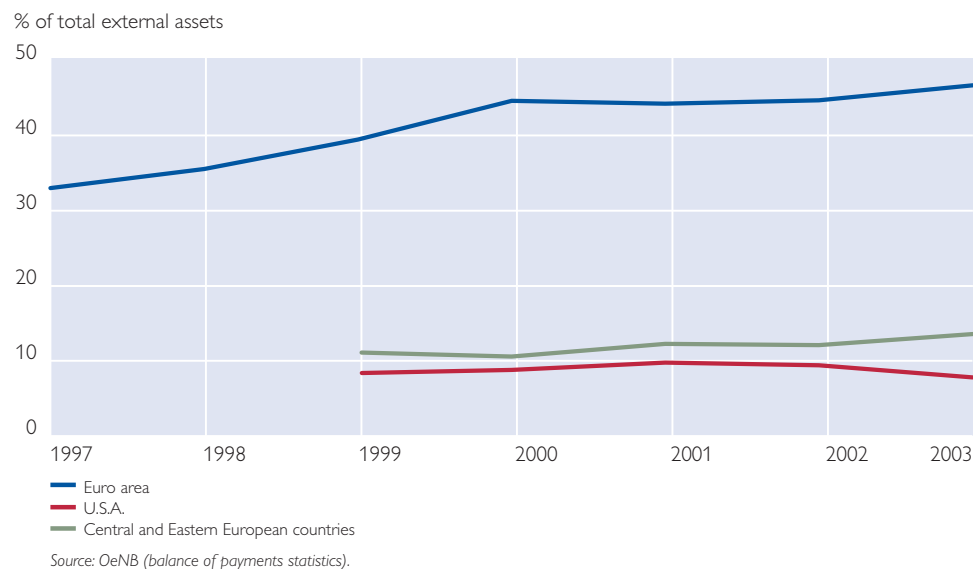
Over the same period, however, the importance of the U.S.A. as an investment region stagnated at the levels of 1999 (8%). Investment growth was also registered in Central and Eastern European countries,⁴ whose share rose from 11% to 14%. This region was especially in demand by Austrian direct investors, in particular. In 2003, it accounted for 17% of all Austrian trade investment asset positions, i.e. more than three times U.S. volumes (5%).

At the end of 2003, the euro area was heavily weighted in the portfolio of Austrian securities investors, in particular. Accounting for two-thirds of total portfolio investment assets, the euro area as an investment region was considerably more important than the U.S.A. (only 10%; see chart 8). Whereas euro area countries accounted for 55% of all equity securities and two-thirds of all debt securities at the end of 2003, U.S. instruments corresponded to just 19% and 7%, respec-

⁴ Albania, Bosnia & Herzegovina, Bulgaria, Estonia, Croatia, Latvia, Lithuania, Moldavia, Poland, Romania, Serbia & Montenegro, Slovak Republic, Slovenia, Czech Republic, Hungary.

Chart 7

Trends in Austrian Financial Assets in Core Regions



tively. The equity exposure of domestic investors in relation to their holdings of debt securities thus tended to be higher in the case of U.S. equities and mutual fund shares than in the case of euro area equities and mutual fund shares. As a target region of financial investment, Germany led by a wide margin within the euro area. From an

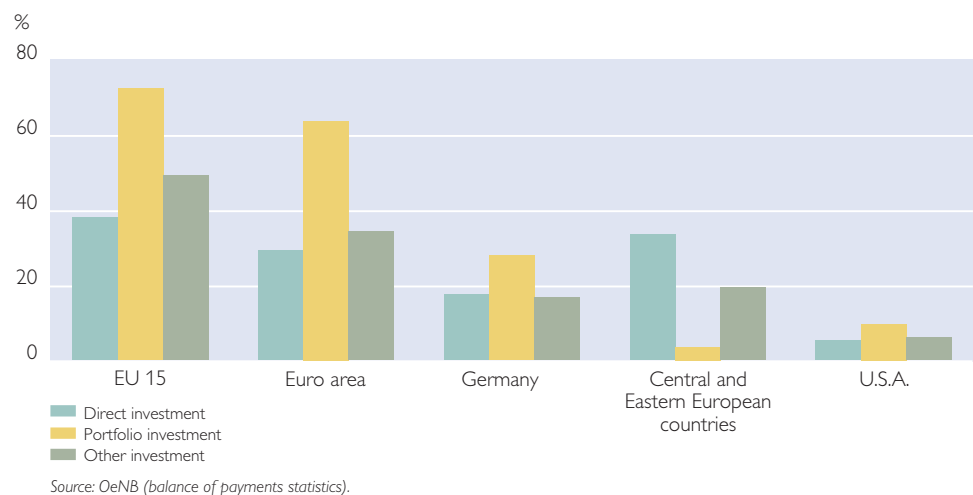
Austrian perspective, the euro area occupies a leading position as a financing region as well. At the end of 2003, it accounted for two-thirds of all inward FDI and 42% of all loans and deposits by nonresidents.

Although a national survey method cannot be used to completely break down foreign investors' total invest-

Chart 8

Austria's External Assets by Region

Regional Share of Relevant Financing Instrument's Global Volume



ments in Austria by region, a regional breakdown can be more or less inferred from an international exchange of data as exemplified by the CPIS⁵ (IMF, 2005). According to this survey, at the end of 2002 the euro area accounted for some two-thirds of total investments held in Austria, with Ger-

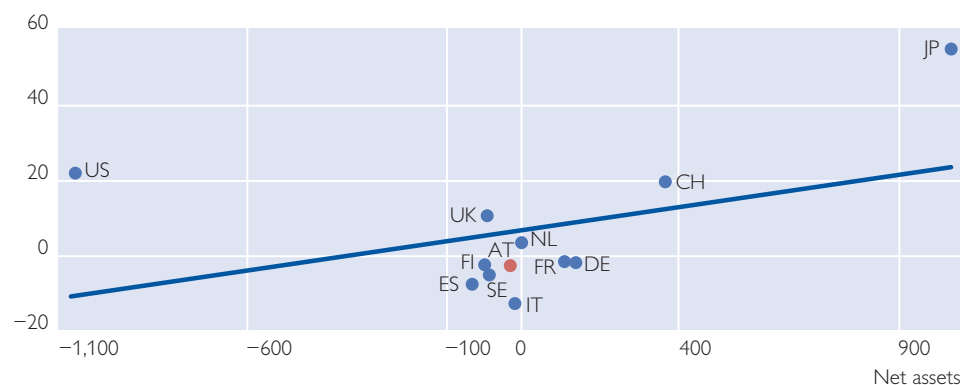
many accounting for 27% alone. As for non-euro area countries, Switzerland (14%), Japan (7%) and the U.S.A (3%) held the biggest asset positions. The OeNB conducts detailed annual analyses of external asset positions based on regional and sectoral data (OeNB, 2003).

Chart 9

Efficiency of Foreign Portfolio in the International Context

Average 1993 to 2002

Net income in USD billion



Source: IMF (International Financial Statistics).

3.4 Austria's Net Income from Foreign Investment – in Line with International Average

Chart 9 shows a comparison of net assets and net income, suggesting a positive correlation for most industrialized countries. As expected, average cross-border net income grew in tandem with net assets over a 10-year observation period. For instance, owing to high net asset levels, Japan shows a correspondingly high level of return on these assets. Any divergences from this correlation can be explained primarily by the different portfolio structures of the countries concerned. Risk-averse foreign portfolios with a high share of debt securities (such as

Austria's – see above) have with the same net assets higher returns than progressively structured portfolios, the returns on which are largely generated by equity price gains (that are not included in net income).

Below-average net income does not therefore necessarily indicate that a given foreign portfolio lacks investment efficiency. Between 1993 and 2002, Austria, whose position in chart 9 does not suggest a significant difference from that of other European countries, was an average net debtor to the order of EUR 33 billion, which led to a deficit in net income of around EUR 2 billion. Countries that are in the second quadrant of chart 9 and thus

⁵ Coordinated Portfolio Investment Survey conducted by the IMF: Austria's external securities liabilities can be determined by the Austrian assets of the countries participating in this survey. Currently, 68 countries, including all major industrialized countries, are taking part in the survey.

breach the assumed correlation in favor of disproportionately high net income merit especial attention. In particular, the U.S.A., which generated a positive return on external assets with a massive net debt between 1993 and 2002, is in an outstanding position. A possible explanation for this phenomenon can be found in the unusual structure of U.S. portfolios, the key investment instrument of which is direct investment. At the end of 2003, 35% of U.S. external assets (USD 2,730 billion) was held as direct investments, which were relatively very profitable due to their high average maturity. Securities accounted for only USD 2,470 billion, although the high share of equities and mutual fund shares (80%) is also likely to have positively influenced the result. In addition, one-third of U.S. external financing is accounted for by bonds, which generated lower returns than, say, the euro area average in the period of observation.

3.5 Conclusions

From the perspective of Austrian financial markets, internationalization means, above all, Europeanization. The Austrian financial sector's strong focus on Europe has dramatically increased in the wake of Austria's acces-

sion to the EU and, in particular, due to the country's participation in European monetary union. Austria's participation in the Internal Market established, above all, the legal and institutional foundations necessary for the rapidly accelerating internationalization of its financial markets observed in this past decade. Germany is not only Austria's major trading partner but also, increasingly, its most important regional partner from a financial perspective. In the past ten years, securities have been the driving force for international financial relations in both Austria and other industrialized countries, with the euro area dominating both investment and financing transactions. Austria's domestic banking sector, which processes by far the largest volume of foreign transactions, continues to be guided by risk aversion in the international arena. This is reflected in the country's particularly low position in foreign equity securities. In view of this (not least, culturally induced) fact, it can be deduced that Austria's external financial assets will in future be affected by international stock market crises (as has recently been visible since 2000) to a far lesser degree than those of many other industrialized countries, whose external positions indicate a riskier profile.

References

- Adam, K., T. Japelli, A. Menichini, M. Padula, and M. Pagano. 2002.** Analyse, Compare, and Apply Alternative Indicators and Monitoring Methodologies to Measure the Evolution of Capital Market Integration in the European Union. Salerno.
- Beale, L., A. Ferrando, P. Hördahl, E. Krylova and C. Monnet. 2004.** Measuring Financial Integration in the Euro Area. Occasional Paper Series. 14. ECB. Frankfurt.
- Bellak, C. 1993.** Effekte aktiver Direktinvestitionen im Ursprungsland. Europäische Hochschulschriften. Verlag Peter Lang. Frankfurt am Main. 129–143.
- BIS. 2005.** Triennial Central Bank Survey. Foreign Exchange and Derivatives Market Activity in 2004. March. Basel.
- Braumann, B. 2002.** Financial Liberalization in Austria: Why So Smooth? In: Financial Stability Report 4. OeNB. Vienna 108–123.
- Association of German Banks. 2003.** Der europäische Zahlungsverkehr im Wandel. Berlin.
- Deutsche Börse. 2000.** Xetra – Quantensprung im Börsenhandel. Frankfurt am Main.
- Deutsche Bundesbank. 2004.** Recent Developments in the Corporate Bond Market. In: Monthly Reports of the Deutsche Bundesbank. April. Frankfurt am Main. 15–26.
- ECB. 2003.** The Euro Area Financial System: Structure, Integration and Policy Initiatives. Working Paper 230. Frankfurt.
- Henneberger, F. and A. Ziegler. 2001.** Internationalisierung der Dienstleistungserstellung. Konsequenzen für den schweizerischen Arbeitsmarkt. HWWA. Hamburg. 16ff.
- IMF. 1993.** Balance of Payments Manual. 5th Edition. Washington.
- IMF. 2005.** Coordinated Portfolio Investment Survey. February, 28.
www.imf.org/external/np/sta/pi/cpis.htm
- Lane, P. and G.-M. Milesi-Ferreti. 2003.** International Financial Integration. Prepared for the IMF's Third Annual Research Conference. Washington.
- Lane, P. and G.-M. Milesi-Ferreti. 2004.** Financial Globalization and Exchange Rates. Prepared for the "Dollars, Debt and Deficits – 60 Years after Bretton Woods" Conference. Co-organized by the IMF and Banco de España. Madrid.
- Lemmen, J. 1998.** Integrating Financial Markets in the European Union. Edward-Elgar. Cheltenham, U.K. and Northampton, U.S.A.
- Lewis, K. 1999.** Trying to Explain the Home Bias in Equities and Consumption. In: Journal of Economic Literature. 37. 571–608.
- Oberndorfer, C. 2003.** Distinguishing Current Account Transactions From Financial Flows. An Analysis of Austria's Current and Financial Transactions with Countries and Regions. In: Focus on Austria 4. OeNB. 158–170
- Obstfeld, M. and A. Taylor. 2004.** Global Capital Markets, Integration, Crisis and Growth. Cambridge University Press. 46–86.
- OeNB. 2003.** Austria's International Investment Position in 2002. In: Focus on Austria 4. 104–115.
- OeNB. 2004.** Austria's International Investment Position in 2003. In: Statistiken – Daten & Analysen Q4/04. Vienna. 59–71.
- Pfaffermayr, M. 1995.** Foreign Outward Direct Investment and Exports in Austrian Manufacturing: Substitutes or Complements? Working Paper 9506. Linz.
- Utzig, S. 2003.** Die Globalisierung der Finanzmärkte vermessen. In: Die Bank 11. Berlin. 727–731.
- Waschiczek, W. and F. Fritzer. 2000.** Austrian Stock Market Survey and Outlook. In: Focus on Austria 4. OeNB. 116–140.
- WTO. 2004.** International Trade Statistics. 13–15. Geneva.