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Integration of the European market for e-finance: evidence from online brokerage

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Discussion Paper No. 02-24

Integration of the European Market for E-Finance – Evidence from Online Brokerage

Martin Schüler
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Non-Technical Summary

The internet revolution is said to foster integration of the market for financial services, since consumers are able to shop around at all companies worldwide and firms can easily offer their services on the internet at a minimum of distribution cost.

Studying the market for online brokerage more closely is facilitated by the fact that there is a homogeneous commodity, i.e. the purchase or sale of stocks for some amount of money. Thus, prices and conditions are comparable between different direct brokers within and also across countries. In this context, integration means that there are no barriers that prevent a consumer from purchasing securities using a foreign direct broker. And, that suppliers of financial services have access to foreign markets, which implies that they can attend to foreign customers on their “domestic” homepage by simple translation into the language of their target group. Hence, if there was complete market integration, one would expect customers to switch to a foreign direct broker if this broker is more suitable to their needs or if this broker offers lower fees and commissions, provided that differences in quality are of minor importance here. As a consequence, in an integrated market huge price differences between online brokers should not exist.

In fact, prices paid for online brokerage differ substantially across European countries giving some evidence for incomplete integration. Among the twelve leading European online brokers prices paid for a 2,500 EUR transaction range from as little as 4.75 EUR to as much as 27.40 EUR and for a 6,000 EUR transaction between 11.40 EUR and 60.00 EUR. Strikingly, there are also major differences in the prices charged by the parent company and the foreign subsidiaries. It looks like in some cases the foreign subsidiaries align with the respective market leader.

Furthermore, a survey among leading European online brokers showed that at the moment almost no broker has customers with place of residence outside their home market, when not accounting for customers that are attended to by foreign subsidiaries. In most of the cases brokers do not attach much importance to the strategy of attending to foreign customers through the domestic homepage, but prefer to enter new markets by co-operation with a provider in the target market or by undertaking mergers or acquisitions. Hence, almost no direct cross-border activities take place, i.e. online purchases of stocks are almost always done using a domestic direct broker.

What are the obstacles that cause this fragmentation of the markets for online brokerage in Europe? Concerning policy-induced obstacles, companies surveyed valued regulation in general as irrelevant. However, the high cost for cross-border transfers, the heterogeneity of the technical systems of stock exchanges, problems
with the identification of foreign customers and questions concerning consumer protection built barriers to market integration.

In regard to natural obstacles: Since e-finance obviously does not require the physical presence of the company, sunk costs arising from a branch network are loosing relevance. However, sunk costs like advertising expenses still play an important role since, according to some online brokers surveyed, a brand name is a prerequisite for acquiring new customers. Besides language and other cultural differences almost all of the brokers identified the preference of the consumer for domestic online brokers as one of the main barriers to direct cross-border business. When it comes to investing or borrowing money or concluding an insurance the “handshake” is a very important prerequisite. Since the internet does not allow for this “handshake”, knowledge of the firm one is giving money to becomes essential. This is probably the main reason why consumers do not naturally switch to a foreign online broker even if they could save a lot of commission and administration fees. And this is why companies usually do not even try to acquire customers through their domestic homepage but rather secure themselves a brand name by cooperation, acquisition or merger with an established local company.

Concerning some of the policy-induced obstacles, policy action has been taken or is underway. Policy action such as the Electronic Commerce Directive, the Distance Marketing Directive, the Directive for the distance selling of financial services, and the European Union-wide network of financial services complaints bodies, FIN-NET, aim on providing suppliers with a clearly defined legal framework and on encouraging consumer confidence. On the supply side this may actually lead to more internationally oriented strategies. However, it seems as if these directives and proposals are probably not effective enough to strengthen consumers’ confidence in foreign suppliers of e-finance.

The consumers’ confidence not only in foreign online providers but also in the internet as a distribution channel in general is very important for fostering integration of the markets for financial services. Cross-border activities of suppliers in the sense of establishing foreign subsidiaries alone do not really help to integrate markets and reduce price dispersion. A much faster way to achieve market integration is to dismantle the obstacles to direct cross-border activity.
Integration of the European Market for E-Finance – Evidence from Online Brokerage

Martin Schüler

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January 2002

Abstract
The internet revolution is said to foster integration of the market for financial services, since consumers are able to shop around at all companies worldwide and firms can easily offer their services on the internet at a minimum of distribution cost. However, the European market for online brokerage displays a different picture. Prices paid for online brokerage differ substantially across European countries. Furthermore, almost no direct cross-border activities take place, i.e. online purchases of stocks are almost always done using a domestic direct broker. It turns out that one of the most important obstacles to integration seems to be the preferences of the consumers for domestic providers. The analyses is partially based on a survey among leading European online brokers.

JEL-Classification: G15, G24

Keywords: E-Finance, Financial Market Integration, European Union

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1 Motivation

There are basically two factors that foster financial market integration. First, policy-induced deregulation both at a national and at an international level, and second, technological change, i.e. the revolution in information technologies (Buch, 2000).

The internet revolution has fuelled euphoric expectations of overcoming natural borders. The euphoric view can be summarised in the following way: Due to the technical advances, consumers are no longer bound to national or regional firms, they are able to shop around at all companies worldwide that provide services online. This holds true for quite a number of products and services in financial markets, such as online banking and brokerage but also mortgage loans and insurance policies, among others. Before actually purchasing a certain financial service online at a bank or insurance company, customers can compare mortgage, insurance, or lending products offered by different suppliers with the help of so-called aggregators\(^1\) complementing the classic internet portals (Claessens et al., 2000, p 10). On the one hand, the internet enables consumers to easily compare financial services and find the cheapest and for their needs best suitable supplier. On the other hand, the internet eliminates a number of processing steps and labour costs, and it avoids or at least reduces the fixed costs of branches and related maintenance. Thus new financial service providers can compete for customers more effectively and at a minimum of distribution cost.

However, this euphoric view might be erroneous. It overlooks the fact that the internet does not necessarily overcome all of the existing barriers to cross-border marketing of financial services. Obstacles like the consumer preference for domestic providers will still remain.

Therefore, what is required is a more balanced view. This analysis tries to contribute to it. With regard to a specific market, the market for online brokerage, it deals with the following question: To which extent does the internet allow for the existence of a truly European Market? The analysis is based on two data bases: (a) price data and (b) data drawn from a survey among European direct brokers.

The following section attempts to assess the extent to which the market for online brokerage in Europe is already integrated. Section 3 discusses the obstacles to further market integration in online brokerage and e-finance in general, section 4

\(^1\) In Europe such aggregators are for example InsuranceCity and Interhyp in Germany.
deals with the question of how these obstacles can be overcome and what the potential benefits for the consumer would be. Section 5 provides a conclusion.

2 Extent of imperfect integration on the market for online brokerage in Europe

Online brokerage means purchasing and selling securities online, i.e. on the internet. It is one part of online banking, which includes bank transactions in general, such as credit transfers. In that sense online brokers or direct brokers are online banks offering security transactions, and apart from keeping an online account, they usually do not provide any other banking services. Studying the market for online brokerage more closely is facilitated by the fact that there is a homogeneous commodity, i.e. the purchase or sale of stocks for some amount of money. Thus, prices and conditions are comparable between different direct brokers within and also across countries.2

This section tries to assess the extent to which the European market for online brokerage is integrated. In this context, integration means that there are no barriers that prevent a consumer from purchasing securities using a foreign direct broker. And, that suppliers of financial services have access to foreign markets, which implies - in the market for online brokerage - that they can attend to foreign customers on their “domestic” homepage by simple translation into the language of their target group. Hence, if there was complete market integration, one would expect customers to switch to a foreign direct broker if this broker is more suitable to their needs or if this broker offers lower fees and commissions, provided that differences in quality are of minor importance here.

As a consequence, huge price differences between online brokers indicate incomplete integration. Of course, even in a fully integrated market, price differences remain due to different cost structures, quality differences, etc. However, if the differences in prices are significant, especially between direct brokers of different EU countries, this can be taken as some evidence for obstacles that remain powerful even in the internet age.

2 Of course there may be differences in the provision such as offering consulting services or special investment products. However, in the following such “quality differences“ are disregarded. Rather we think of online brokerage as pure purchasing or selling of securities.
Price differences in Europe

Figure 1 shows the leading European direct brokers by the number of accounts. Altogether these twelve providers account for over 70 percent of all European market online accounts.

![Figure 1: Market shares of online brokers in Europe](image)

With almost two million online accounts at the end of 2000, the German market for online brokerage is by far the largest in Europe, which explains that six (Comdirect, Consors, Direkt Anlage Bank, Brokerage 24, Entrium, Advance Bank) of those twelve leading online brokers are located in Germany. E-cortal and Fimatex have France as their home market, the second largest market in Europe with about 415,000 accounts. Schwab Europe and Barclays primarily serve the British market which has about 280,000 accounts. Fineco/BIPOP is located in Italy and Bankinter in Spain. The Italian market has a total of about 230,000 accounts, the Spanish of about 185,000 accounts.

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3 According to a study by the Bundesverband deutscher Banken in the second quarter of 2001 8 % of total population in Germany used the internet for brokerage services.

4 Although being the third-largest market in Europe with about 410,00 accounts at end 2000, there is no Swedish online broker under the top 12. The market in the Netherlands has about 235,000 accounts, the Swiss market a good 100,000 accounts. Figures are taken from JP Morgan
Figure 2 shows how much a purchase of stocks of an amount of 2,500 EUR and 6,000 EUR costs at each of the online brokers. There are clear price differences ranging from as little as 4.75 EUR to as much as 27.40 EUR for the 2,500 EUR transaction and of between 11.40 EUR and 60.00 EUR for the 6,000 EUR transaction. For the 2,500 EUR transaction the mean over those twelve brokers is 13.11 EUR with a standard deviation of 5.81 EUR. For the 6,000 EUR transaction the mean is 21.13 EUR and the average deviation from the mean is 13.62 EUR. This comparison displays huge price differences among European online brokers.

![Figure 2: Transaction costs in Europe](image)

However, the calculations of figure 2 do not include any administration charges and do not allow for more sophisticated comparisons. Thus, five different customer groups are defined, namely the type “Student”, “Old Age Provision”, “Private Day Trader”, “Experienced Speculator”, and “Wealthy Investor”. Then the prices a consumer of each group would pay per year, including commission rates and fees (2001a). In the following the focus is on the top 12 brokers in Europe since they serve the most important markets and since they are likely to be able to operate on a European scale.

5 All commissions and fees are taken from the online brokers’ homepages. Considered are the costs for purchasing or selling of stocks at the domestic exchange. In the following price comparisons, additional fees for purchasing foreign stocks are disregarded. Those fees are usually low and thus the abstraction does not affect the line of reasoning. All prices are as of October 1, 2001.
for administration, are calculated. The characteristics of the different customer groups are shown in table 1, the corresponding prices they pay in figures 3 to 7.

<table>
<thead>
<tr>
<th>Customer group</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Student”</td>
<td>High risk of investment, small transaction volumes, small portfolio volume, medium number of trades p.a.</td>
</tr>
<tr>
<td>“Old age provision”</td>
<td>Low risk of investment, medium transaction volumes, medium portfolio volume, small number of trades p.a.</td>
</tr>
<tr>
<td>“Private Day Trader”</td>
<td>High risk of investment, medium transaction volumes, medium portfolio volume, large number of trades p.a.</td>
</tr>
<tr>
<td>“Experienced Speculator”</td>
<td>Medium risk of investment, medium transaction volumes, medium portfolio volume, small number of trades p.a.</td>
</tr>
<tr>
<td>“Wealthy Investor”</td>
<td>Low risk of investment, large transaction volumes, large portfolio volume, small number of trades p.a.</td>
</tr>
</tbody>
</table>

Figure 3: Annual costs for consumer type “Student”

Source: Company data, own calculations; as of October 1, 2001
Figure 4: Annual costs for consumer type “Old Age Provision”

Annual transaction and administration fees for a consumer of type “Old Age Provision”
(in EUR; 3 trades p.a. with transaction volume of 2,500 EUR, and a total of 20,000 EUR portfolio volume)

Source: Company data, own calculations; as of October 1, 2001

Figure 5: Annual costs for consumer type “Private Day Trader”

Annual transaction and administration fees for a consumer of type “Private Daytrader”
(in EUR; 100 trades p.a. with transaction volume of 5,000 EUR, and a total of 50,000 EUR portfolio volume)

Source: Company data, own calculations; as of October 1, 2001
Figure 6: Annual costs for consumer type “Experienced Speculator”

Annual transaction and administration fees for a consumer of type "Experienced Speculator"
(in EUR; 6 trades p.a. with transaction volume of 3,000 EUR, and a total of 25,000 EUR portfolio volume)

Source: Company data, own calculations; as of October 1, 2001

Figure 7: Annual costs for consumer type “Wealthy Investor”

Annual transaction and administration fees for a consumer of type "Wealthy Investor"
(in EUR; 6 trades p.a. with transaction volume of 12,500 EUR, and a total of 250,000 EUR portfolio volume)

Source: Company data, own calculations; as of October 1, 2001
Obviously, prices paid for online brokerage differ substantially for all customer groups. Even when eliminating the three most expensive brokers from the sample for each case, prices vary by quite an amount. For example, a consumer of type “Student” pays about three times as much when doing brokerage with Brokerage 24 in Germany as when using Fineco in Italy.

The important question in this context is whether there are any significant differences between countries and whether direct brokers within one country charge about the same prices. If this is the case, this would be at least some evidence for the observation that markets for online brokerage in Europe are not integrated. Thus “within” versus “between” price dispersions are compared. Indeed, the two French companies in the sample, e-cortal and Fimatex, which account for over 50 percent of the French market, have about the same price levels except for the consumer of type “Student” and “Old Age Provision”. Also the German discount brokers show similar pricing behaviours. Usually, they are below the average in Europe. The two British online brokers, Schwab Europe and Barclays, which account for approx. 65 percent of the British market, are far above average except for the consumer type “Wealthy Investor”. Bankinter, which has a market share of over 70 percent in Spain, is also far above average in most of the cases, only for the type “Student” and “Private Day Trader” is it slightly below the average in Europe. The Italian market leader Fineco/BIPOP with a market share of approx. 70 percent in Italy is below average for all customer groups.

Thus, taking into account that the companies in the sample are dominating their home markets, respectively, the above analysis shows that online brokers within one country are quite alike in their prices. As opposed to that, the differences in commissions and fees charged by online brokers between countries are considerable, indicating that the markets for online brokerage are rather fragmented in Europe.

Another point supports this assessment. Figures 8 to 11 show the prices charged by direct brokers and some of their foreign subsidiaries in comparison to the respective market leader. Consors has subsidiaries in France, Italy, Spain and Switzerland. The Direkt Anlage Bank serves France, Italy, Spain, and the UK through the online broker Selftrade. The two French direct brokers, e-cortal and Fimatex, have subsidiaries in Germany, the United Kingdom, and Spain.
Figure 8: Consors - comparison of transaction fees between parent company and subsidiaries

Consors Germany and foreign subsidiaries - transaction fees of a 2,500 and 6,000 EUR transaction (in EUR)

Consors Germany Consors France Market leader France (e-cortal) Consors Italy Market leader Italy (Fineco) Consors Spain Market leader Spain (Bankinter)

Source: Company data, own calculations, as of October 1, 2001

Figure 9: DAB - comparison of transaction fees between parent company and subsidiaries

Direkt Anlage Bank Germany and foreign subsidiaries - transaction fees of a 2,500 EUR and 6,000 EUR transaction (in EUR)

DAB Germany Selftrade France Market leader France (e-cortal) Selftrade Italy Market leader Italy (Fineco) Selftrade Spain Market leader Spain (Bankinter)

Source: Company data, own calculations, as of October 1, 2001
Figure 10: e-cortal - comparison of transaction fees between parent company and subsidiaries

Source: Company data, own calculations, as of October 1, 2001

Figure 11: Fimatex - comparison of transaction fees between parent company and subsidiaries

Source: Company data, own calculations, as of October 1, 2001
Surprisingly, there are major differences in the prices charged by the parent company and the foreign subsidiaries. It looks like in some cases the foreign subsidiaries align with the respective market leader. This seems to be the case for Fimatex Germany (Figure 11), whose prices are clearly lower than those of its parent company in France. The same holds true for e-cortal Spain (Figure 10), Selftrade Italy (Figure 9) and Consors Italy (Figure 8).

To summarise, there are substantial differences in the pricing behaviour between direct brokers in different countries, even if they have the same parent company. Bearing in mind that we were to compare prices of a homogeneous commodity postulating that quality differences are of minor importance, the variety in prices indicates that the markets for online brokerage in Europe are rather fragmented than integrated.

**The US as a benchmark**

Looking at the United States as a benchmark for an integrated market can help us interpret the above results. Figure 12 shows the costs of a 2,500 EUR and a 6,000 EUR purchase of stocks at the five leading US direct brokers that account for over 80 percent of the total US market.6

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6 Commissions and fees were converted to Euro equivalents at the exchange rate of 0.9216 USD/EUR.
Here the differences in prices are smaller than in Europe. Especially for a 6,000 EUR transaction, prices range from as low as 8.68 EUR to as high as 32.50 EUR in the US compared to as low as 11.40 EUR and as high as 60 EUR in Europe.

Of course there are still differences in the commissions and fees charged due to differences in the structure and the aims of a given company or due to quality differences, such as offering consulting.\textsuperscript{7} However, the smaller differences in the US seem to support the hypothesis that the market for online brokerage in Europe is not integrated yet.

**Cross-border activities**

Another indicator for financial market integration is the direct measure of cross-border activity. In online brokerage there are basically two types of cross-border activity. First, companies can get access to other markets by addressing the foreign client directly through the domestic homepage. Second, firms can establish a subsidiary, co-operate or merge with a company in the target country.

A survey (see box) among leading European online brokers showed that at the moment almost no broker has customers with place of residence outside their home market, when not accounting for customers that are attended to by foreign subsidiaries. Furthermore, a large part of the direct brokers do not expect any increase in the number of foreign customers within the next two or five years. In most of the cases they do not attach much importance to the strategy of attending to foreign customers through the domestic homepage, but prefer to enter new markets by co-operation with a provider in the target market or by undertaking mergers or acquisitions.

An exception to this are some Swiss banks, whose customers with foreign residence already account for about five percent on average, and who predict an increase for the next few years. It is highly important for this restricted number of brokers to serve customers in neighbouring countries like France and Germany directly through the domestic homepage. Whereas they do not rely on subsidiaries, co-operation or

\textsuperscript{7} Schwab, for example, clearly focuses on wealthier investors that usually also attach importance to consulting services. This is probably an explanation for Schwab’s prices being above the US average.
mergers for gaining access to foreign markets. However, the Swiss case clearly is an exception since in this case language problems are irrelevant. Furthermore, there may be a bias due to tax privilege issues. For almost all other online brokers surveyed, attending to their foreign clients on the domestic homepage is of minor or even no importance.

This result is quite surprising since the internet is said to make distance less important. Also one would expect that translating the domestic homepage is the most cost-effective way of addressing foreign customers. The fact that most direct brokers establish foreign subsidiaries or try to co-operate or merge with a foreign company indicates that some barriers or circumstances exist that make the strategy of attending to foreign customers on the domestic homepage the less successful one. Such circumstances are dealt with in section 3.

3 Obstacles to perfect market integration

Section 2 states that there are major differences in prices for online brokerage between direct brokers in different European countries and that almost no direct cross-border purchase takes place, i.e. online purchases of stocks are almost always done using a domestic direct broker. The question which suggests itself is why this is the case. What are the obstacles that cause this fragmentation of the markets for online brokerage in Europe? Due to the characteristics of the internet mentioned above, one would expect at least some Europeans to make use of the major price differences and open up an account for brokerage at a lower-cost, foreign direct broker.

In general, fragmentation in markets for financial services can either be due to policy-induced or to natural factors. Policy-induced obstacles are regulation and taxes, in particular, obstacles that can be reduced by policy-makers. As opposed to this, natural obstacles are independent of political actions at least in the short and medium run. Such barriers to financial market integration are, for example, preferences and confidence of consumers, differences in culture and/or language, technology and network cost.

Natural obstacles

Related to e-finance, the obstacle question is of special importance. If it turns out that natural obstacles are the major reason for fragmentation, some sort of fragmentation will always remain and the market for e-finance will not become fully integrated - at least not in the short and medium run. Of course there is no question about the internet fostering market integration by giving consumers the possibility to purchase goods and services abroad more easily. However, the often praised quality of the internet to bust borders would lose relevance in this context.
In the past, i.e. for traditional distribution of financial services, sunk costs were important entry barriers (Claessens et al., 2000). Among them were, for example, branch networks, branding advantages involving large up-front advertising expenses, long-lasting customer relationships, substantial up-front investments in technology. With the internet, one would expect most of those barriers to have become obsolete.

Since e-finance obviously does not require the physical presence of the company, sunk costs arising from a branch network are loosing relevance. The same holds true for up-front investment in technology. However, sunk costs like advertising expenses still play an important role since, according to some online brokers surveyed, a brand name is a prerequisite for acquiring new customers. Concerning long-lasting customer relationships the conclusion is not that clear-cut. On the one hand, one would expect customer-firm-relationships to continue to play an important role, especially when it comes to banking. On the other hand, customers doing online brokerage seem to be more open to switching providers in general.

In the survey among leading European direct brokers⁸, almost all of them state that reaching the critical size for entering the market is very relevant as a barrier to entry as well as the fact that the respective market is already saturated. This is probably one reason why most of the online brokers aim at mergers and acquisitions or at establishing subsidiaries in the case of sufficient market growth in order to get access to new markets. This reveals continuing importance of sunk costs.

However, this does not per se rule out the strategy of acquiring new foreign customers directly through the domestic homepage, since in connection with this strategy the question of critical size is of no relevance (European Central Bank, 1999). Problems in this context are rather seen in language and other cultural differences or the lack of market experience. Obviously, those problems can hardly be solved from the home country by translating the web page alone. Instead, actual presence in the target market is required by establishing a subsidiary or merge with a local company in order to get the necessary know-how from local managers.

Furthermore the majority of the direct brokers surveyed stated the preference of the consumer for domestic companies to be a very important barrier for market entry. Also in this context, the restricted recognition of the trade mark was named as a reason why they find it difficult or do not even try to acquire foreign customers directly through their domestic homepage.

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⁸ The online brokers were asked for their assessment on the importance of various barriers to market entry in various European countries. Since the answers did not significantly differ between the European countries studied, the respective obstacles are regarded as barriers to entry for all European markets.
**Policy-induced obstacles**

The obstacles stated so far are all natural obstacles, i.e. barriers that cannot be removed by policy action, at least not in the short or medium run. Concerning policy-induced obstacles, companies surveyed valued regulation in general as irrelevant. However, a few stated that structural problems in the European payment system impair them in addressing foreign customers directly through the homepage. This is evident since investors do transfers between the online account at the direct broker and the current account that is usually kept at a bank located in the country of the consumer’s place of work.

In this context the high cost for cross-border transfers play a major role. A study published by the European Commission in September 2001 (European Commission, 2001) shows that the average cost of a cross-border credit transfer of 100 EUR is still 24.09 EUR. This compares to only about one Euro on average for a transfer within one country. The study was conducted in March 2001 by sending 1,480 cross-border transfers of 100 EUR in 15 EU Member Countries using 40 bank accounts. It was to verify the requirements of the Cross-Border Credit Transfers Directive (COM, 1997) adopted on January 27, 1997 that introduced provisions on transparency, performance and redress procedures concerning cross-border credit transfers. This directive was devised to ensure that funds could be transferred from one Member State to another rapidly, reliably and inexpensively. It was to be transposed into national law by August 14, 1999.

Figure 13 shows total transfer costs by sender country (European Commission, 2001). With an average of 47 EUR and 36 EUR, Greece and Ireland have the highest transfer costs. At the other end of the scale Belgium, Germany, and the Netherlands all have average costs of less than 15 EUR. Luxembourg has the lowest costs with an average of less than 10 EUR. Clearly, a cross-border transfer is much more expensive than a transfer within a country thus preventing customers from choosing a foreign direct broker and impairing cross-border business in general. This obstacle to financial market integration was addressed by the European Commission with a regulation that will be discussed in section 4.

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9 Another survey on the cost of cross-border transfers published by the European Commission in July 2001 states that charges for cross-border transfer transactions of 100 EUR were 17.36 EUR. However, this survey is based on only 350 transfers carried out mainly in border areas.
Another obstacle mentioned by the online brokers surveyed was identification of clients across borders. Unless a customer visits a branch in person, identification is frequently provided by local post offices which, according to a broker interviewed, often causes problems. However, another company stated that identification by the respective embassy or a notary is quite easy. Nevertheless, such a procedure may discourage consumers in choosing a foreign online broker.

Furthermore, the heterogeneity of the technical systems of stock exchanges was mentioned as an obstacle. Concerning the trading industry, increased integration between stock exchanges has taken place in the form of cross-border co-operation and mergers. However, the clearing and settlement infrastructure has remained relatively fragmented (European Central Bank, 2001a) As a consequence, some online brokers charge additional fees for purchasing and selling of stocks at foreign exchanges or do not even offer this service. This may also impair customers from choosing a supplier abroad.

Of course the survey among online brokers states obstacles from the suppliers’ point of view, only. From a consumer perspective the question of consumer protection is of crucial importance when choosing a foreign supplier. This includes issues such as cross-border redress and price transparency. Also, common standards and protocols between countries are needed to assure desired privacy levels (Claessens et al., 2000, p 5).
Table 2 summarises the barriers to integration in the market for online brokerage by natural and policy-induced obstacles. Most of the obstacles mentioned in the context of online brokerage should also be relevant for other online financial services such as mortgage loans or insurance policies, although other obstacles might arise like, for example, monitoring problems.

<table>
<thead>
<tr>
<th>Natural obstacles</th>
<th>Policy-induced obstacles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference of the consumer for domestic online brokers</td>
<td>Structural problems in the transfer system; high cost of cross-border transactions</td>
</tr>
<tr>
<td>Language and other cultural differences</td>
<td>Cross-border identification</td>
</tr>
<tr>
<td>Sunk costs</td>
<td>Consumer protection</td>
</tr>
<tr>
<td>Critical size for entering the market is out of reach</td>
<td>Heterogeneity of trading, clearing, and settlement</td>
</tr>
<tr>
<td>Market is saturated</td>
<td></td>
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<tr>
<td>Lack of market experience</td>
<td></td>
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<tr>
<td>Lack of brand value</td>
<td></td>
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</tbody>
</table>

4 Overcoming fragmentation

The barriers mentioned by the online brokers surveyed, the saturation of almost all European markets, the failure to reach the critical size for entering the market, the lack of market experience and high up-front advertising expenses, are traditional entry barriers. These are the factors that impair suppliers of financial services and suppliers in general in the acquisition of foreign customers, thus representing obstacles to the integration of markets. These obstacles are natural and cannot – or should not - be addressed by policy makers with the exception of anti trust policy.

Then there are other natural obstacles like language and cultural differences that directly hamper market integration. The survey showed that those obstacles remaining at any rate are of quite an importance. Thus total market integration cannot be expected even if all policy-induced obstacles were removed.

Another very important obstacle to integration of online brokerage markets is the preference of consumers for domestic providers. Probably this holds true for e-finance in general. When it comes to investing or borrowing money or concluding an insurance the “handshake” is a very important prerequisite (Leamer and Storper, 2001). Since the internet does not allow for this “handshake”, knowledge of the firm one is giving money to becomes essential. This is probably the main reason why consumers do not naturally switch to a foreign online broker even if they could save
a lot of commission and administration fees. And this is why companies usually do not even try to acquire customers through their domestic homepage but rather secure themselves a brand name by co-operation, acquisition or merger with an established local company. Furthermore, this leads to developments where some online brokers get “offline” in the sense that they establish branches, so called “investment centres”, where people can literally get that “handshake”.\textsuperscript{10} In this context, consumer protection becomes an important issue, too.

\textit{Policy actions}

With cross-border transactions, the jurisdiction of the legislative or regulatory authority for investor protection must be clear-cut. This point is addressed by the Electronic Commerce Directive (COM, 2000) adopted on June 8, 2000 defining the place of establishment as the place where an operator actually pursues an economic activity through a fixed establishment, irrespective of where websites or servers are situated or where the operator may have a mail box.

But this implies that when a customer has some kind of problem with his foreign online broker he needs to know about the law of this foreign country. Consumers need to access cross-border redress easily. To ensure rapid, low-cost and effective cross-border out-of-court redress, the European Commission launched FIN-NET (COM, 1998a) on February 1, 2001, a European Union-wide network of financial services complaints bodies (see also box).

Furthermore, a communication (COM, 2001) was released by the Commission in February 2001 that relates to the E-Commerce Directive and proposes several measures designed to enhance consumer protection and confidence. In

\begin{center}
\textbf{FIN-NET: Out-of-court complaint network for financial services in the European economic area}
\end{center}

FIN-NET links more than 35 different national complaint bodies into an EU-wide complaint network. Thus the existing national infrastructure is used. The objective is to make out-of-court settlement of cross-border dispute accessible to the consumer when the consumer and the provider of the financial service do not come from the same Member State. This is achieved by mutual recognition of the national redress bodies and exchange of information.

In case of a dispute the consumer will be able to complain to a third party even if the supplier does not adhere to the complaint scheme in the consumer’s country of residence. The complainant is put in touch with the redress body in the supplier’s country of operation through the redress body in his own country of residence.

Except for very few cases, a consumer not satisfied with the outcome of the out-of-court settlement can still bring his case to court.

\textsuperscript{10} In particular, this physical presence becomes important when latent necessities have to be stimulated that, finally, are behind abstract goods like insurance coverage. Clemons and Hitt (2000, p 27) note: “The industry adage, ‘Insurance is a product that is sold, not bought, suggests that the agent may have a significant role in generating demand for insurance products.”
order to increase people’s confidence in foreign suppliers they need to get information that is of high quality and, above all, comparable information. Part of this problem is addressed with the harmonisation of key marketing rules in the proposed Distance Marketing Directive (COM, 1999) that aims at encouraging consumer confidence in retail financial services provided for example on the internet. This directive was proposed in July 1999 but has not been adopted yet. The Directive for the distance selling of financial services (COM, 1998b) was proposed in October 1998 and approved by the EU’s Council of Ministers on September 27, 2001. Among other things it establishes several consumer rights such as a withdrawal-right and an obligation to provide consumers with comprehensive information before a contract is concluded. Therefore this directive certainly contributes to the strengthening of consumer protection.

Thus, concerning some of the above-mentioned policy-induced obstacles, policy action has been taken or is underway in order to provide suppliers with a clearly defined legal framework and to encourage consumer confidence. On the supply side this may actually lead to more internationally oriented strategies. However, it seems as if these directives and proposals are probably not effective enough to strengthen consumers’ confidence in foreign suppliers of e-finance. One problem is that, very often, consumers have never heard of anything like FIN-NET. Beyond the above-mentioned policy actions, information and also comparisons of various suppliers could be provided, for example by consumer councils. So far such organisations as well as specific magazines and journals tend to compare national suppliers, only. Possibly, the consumers’ confidence could be enhanced if they could read in magazines about the possibility of switching to a foreign direct broker and about the protection rules applicable. Furthermore, companies by themselves should step in when it comes to show the consumers the possibilities they have and what kind of consumer protection procedures, such as FIN-NET, already exist.11

Concerning the high costs for cross-border credit transfers discussed above, the EU Commission has proposed a regulation according to which charges for transactions in Euro in the internal market should be the same for cross-border payments as for domestic payments. Although, it was discussed intensively and often criticised, among others by the ECB (Padoa-Schioppa, 2001) the European Parliament as well as the EU Ministers approved the proposal. Hence, the provision will apply as of July 1, 2002 for card payment and cash dispensers and as of July 1, 2003 for bank transfers.

11 There exists for example an initiative led by CEOs of more than 60 companies engaged in e-commerce globally, called Global Business Dialogue On Electronic Commerce (GBDe), that among other things, aims on fostering consumer confidence in the use of the internet worldwide.
Bearing in mind that the Commission has been exhorting banks for more than 10 years to lower charges for cross-border transfers, price control looks like the only effective measure. However, this proposal has several problematic points. There are valid reasons why the costs for cross-border transactions are higher than for domestic transfers although this does not justify the current extreme fee amounts. The main reason is that there is no common payment system for low-value transactions in the Eurozone yet, a fact which limits automated processing. Also, economies of scale are prevented since the volume of payments is not sufficiently large relative to national volumes. Obviously the creation of a common payment system would be the best solution. But this takes time, money and a kind of cooperation between financial institutions that did not exist so far. So if banks are forced to provide cross-border transfers below cost, this implies the risk that they seek compensation through an increase in domestic fees or that they stop providing that service altogether, which would certainly leave consumers worse off.

There is already an agreement among a number of banks to limit the price for a cross-border transfer to 3 EUR, namely the multilateral interchange fee (MIF) (Padoa-Schioppa, 2001; Financial Times, 2001). With such an agreement consumers would know when they pay too much and the barrier to cross-border transactions would at least be reduced. Furthermore, the banking industry made a voluntary commitment to lower prices substantially until they reach by end of 2005 domestic levels. Nevertheless, at the end of the day a common payment infrastructure - also for low-value transactions - is necessary in order to remove this important obstacle to integration in the market for financial services. The recent proposal by the Eurosystem to either create a new automated clearing house or to link the existing domestic clearing houses seems to be promising (European Central Bank, 2001b).

To summarise, there are several policy actions underway that address most of the policy-induced obstacles. However, the proposed measures are very unlikely to encourage consumer confidence. The consumer’s preference for the domestic supplier thus remains as a natural obstacle, as well as others that hinder integration in the European market for online brokerage and for e-finance in general.

**Potential benefits**

The above analyses demonstrate that due to several obstacles the markets for online brokerage in Europe are to a large degree fragmented. Thus per se there seems to be potential for further market integration. Probably, progressive integration would lead to a greater diversity of online brokerage services provided and to more competition, unless major consolidation occurs. Prices for online brokerage services would converge and under normal circumstances decrease. Consumers in countries with online brokers that currently charge commissions and fees above the average would gain most, e.g. consumers in the United Kingdom and Spain. Recalling that people in those countries often pay more than five times as much as investors in other EU
countries, gains could be substantial. However, how much prices would move and consumers would gain is up to speculation.

Bearing in mind, however, that the most important obstacles seem to be natural and cannot be reduced by policy actions at least not in the short and medium run, the potential of further integration in the market for e-finance seems to be rather restricted. This corresponds with the results of some questions in the survey among online brokers. Only half of the online brokers surveyed estimate that prices for online brokerage on the most important European markets will converge in the next two years. About one third estimates that the average price level will decrease. Hence, also the potential benefits from a further integration of markets seem to be rather small in scale.

5 Conclusion

Comparing European countries, major differences in prices for online brokerage services can be observed, although the prices of direct brokers within one country are quite similar. Also, almost no direct cross-border transactions occur, i.e. almost all users of online brokerage have a domestic supplier. Usually, online brokers do not try to attend to foreign customers over their domestic homepage thus depriving themselves of utilising the advantages of the internet, i.e. cost savings, especially reducing fixed costs of branches and related maintenance. All this implies that there are various obstacles that cause markets to be rather fragmented than integrated.

The main reasons for this segregation of markets are natural obstacles such as the preference of consumers for domestic providers, or language and cultural differences. As long as consumers “think in borders and languages”, full market integration is illusionary even with the internet that certainly helps consumers to get access to foreign suppliers.

This result may be somewhat frustrating, however, policy action is needed in order to reduce obstacles like the high cost of cross-border credit transfers or other policy-induced barriers. Some directives and proposals have been devised that address some of those obstacles. These policy actions may well lead to more internationally oriented strategies on the supply side since they provide suppliers with a legal framework. However, they will hardly strengthen consumers’ confidence in foreign suppliers they just know from the internet.

The consumers’ confidence not only in foreign online providers but also in the internet as a distribution channel in general is very important for fostering integration of the markets for financial services. As the above analyses have shown, cross-border activities of suppliers in the sense of establishing foreign subsidiaries alone do not really help to integrate markets and reduce price dispersion. A much
faster way to achieve market integration is to dismantle the obstacles to direct cross-border activity.

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