

## I Introduction

In historical perspective, direct investment by Austrian enterprises is a very recent phenomenon. While some of the current cross-ownership between firms dates to the 19<sup>th</sup> century, it was a byproduct of the disintegration of the Austro-Hungarian monarchy rather than the outcome of an intentional internationalization strategy. An analysis of the periods for which fairly reliable and comparable data are available indicates that net foreign direct investment (FDI) came to only a few hundredths of a percentage point of GDP in the 1960s, roughly 0.1 percentage point in the 1970s and never exceeded 0.4 percentage point a year until 1988. As a result of this hesitant expansion of direct investment, in 1980, when worldwide stocks of strategic cross-border equity holdings already amounted to about 5.5% to 6% of total world GNP, Austrian companies' holdings abroad totaled just 0.7% of Austria's GDP.<sup>1)</sup>

Not until the mid-1970s did the Oesterreichische Nationalbank (OeNB) start to keep statistics on stocks of Austrian outward direct investment, which demonstrates how long it took for the awareness of strategic outward FDI to grow. There are several reasons for Austria's internationalization lag around 1980: In the period following World War II, Austria's economic structure had to be rebuilt, making the country a capital importer. After the end of the reconstruction, Austria's economy displayed two main types of companies: a predominant group of small and medium-sized companies, and a handful of large or, by international standards, mid-sized enterprises. These large companies were for the most part (directly or indirectly) nationalized, and most of their business was domestic. What is more, economic policymakers saw no grounds to promote Austrian firms' investment abroad, giving precedence to the creation of value added in Austria. Finally, over time Austria's position bordering on the Iron Curtain proved to be a handicap for smaller companies, for whom geographical proximity does appear to play much more of a role than for large multinational groups that operate at the global level.

The opening up of Eastern Europe in 1989 marked a complete change of scenery: By 1989 net direct investment flows had already augmented to 0.67% of GDP, and since 1990, outward FDI has averaged just under 1% of GDP. At the same time, a worldwide trend toward cross-border takeovers, crossholdings of shares and restructuring had repercussions on Austria as well. Austria's nationalized industry, too, had already started to acquire equity stakes abroad in the 1980s, and the OeNB removed the last capital controls in November 1991.

Table 1 demonstrates the role Central and Eastern European countries (the CEECs) and Southeastern Europe (SEE) played in the internationalization of Austria's economy.

As a result of stepped-up investment abroad, Austria was able to participate in the globalization boom of the 1990s. At the end of 1999, the value of Austrian outward FDI stocks exceeded EUR 19 billion or 9% of GDP. This still puts Austria some 7 percentage points behind the current worldwide average, but the gap has narrowed at least in relative terms.<sup>2)</sup>

1 UNCTAD (2001, annex table B5).

2 UNCTAD (2001).

Table 1

<b>Austrian Outward Direct Investment Flows</b>										
<b>in Percent of GDP from 1992 to 2001</b>										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
	%									
Total	0.89	0.64	0.63	0.48	0.84	0.97	1.30	1.58	1.77	1.40
CEEC-19	0.25	0.26	0.22	0.23	0.23	0.52	0.41	0.53	1.17	1.13
Rest of the world	0.64	0.38	0.41	0.25	0.60	0.45	0.89	1.05	0.60	0.27

Source: OeNB.

In Central and Eastern Europe, Austria has become a prominent investor even measured in absolute figures.

According to data provided by The Vienna Institute for International Economic Studies (WIIW),<sup>1)</sup> Austria is close to the top of the list of direct investors in some CEECs. In Slovenia and Croatia, for example, Austria owns some 45% and 30%, respectively, of the FDI capital stock, making it the largest foreign investor by far. In Hungary, the Czech Republic and Slovakia, Austria holds about 10% to 20% of FDI, thus ranging third behind Germany and the Netherlands.

Another set of data bears witness to how immensely important the CEE region is for Austrian enterprises' equity investment abroad and thus how great Austria's interest is in the economic development of the applicant nations. According to the UNCTAD report mentioned above, this region has garnered only slightly over 2% of the world investment volume. By contrast, this region accounted for roughly 30% of Austria's outward FDI at the end of 1999. Considering that FDI expanded by more than EUR 4 billion in 2000 and 2001,<sup>2)</sup> the share in fact climbs to nearly 40% at the turn of the year 2001/2002. Austria's share of outward FDI in the CEE region is very high even by comparison to that of other (Western European) countries with a similar geographic position. This region accounts for 6% of Denmark's and 5% of Germany's outward direct investment.<sup>3)</sup> Finnish and Swedish investment in the region comes to about 3% and 2% of their FDI, respectively, and less than 2% of Switzerland's FDI assets are in the CEECs, even though many multinational corporations have their registered office in Switzerland. A negligible ½ percent of U.S. groups' investment is located in the CEE region.

Hence more and more Austrian companies depend on the economic development of the accession countries, not only because of their foreign trade links, but also because of their ties as owners of equity stakes in foreign-based manufacturing facilities. A more detailed portrait of direct investment enterprises in the CEECs will help to better assess the possible effects of a future EU entry of the accession countries on Austrian direct investment enterprises, and its indirect effect on Austrian direct investors.

1 WIIW-WIFO data base of February 2002.

2 Hence, total FDI in 2000 and 2001 in fact surpassed investment in the entire period from 1993 to 1999. This renewed surge in investment is likely to reflect investors' expectation that this area will soon be integrated into the European Union.

3 Eurostat (New Cronos, data of February 4, 2002).

## 2 Features of Austrian Direct Investment Enterprises

At year-end 1999, Austria had 1,019 direct investments<sup>1)</sup> in the accession countries; total equity capital investment amounted to EUR 5.3 billion, and the number of employees working in these enterprises (weighted by the direct investor's percentage ownership of the enterprise's nominal capital) amounted to more than 199,000. Thus these 13 countries account for nearly half of Austria's outward FDI, well over a quarter of the invested capital and 60% of the employees working abroad. Four of the six principal target countries for Austrian direct investment are accession countries: Hungary tops the list with 404 direct investments (ahead of Germany, with 325 direct investment stakes), followed by the Czech Republic with 257 direct investments (ahead of Switzerland, with 137 direct investments), Poland (105 direct investments) and Slovakia (101 direct investments). Three of these four main targets for Austrian direct investment are frontrunners for accession and became investment targets for Austrian equity at a very early point in time. Austrian investors' interest concentrated on these four countries, which accounted for 85% of direct investment, 78% of direct investment capital and 91% of employees within the group of accession countries.

Moreover, Austrian direct investors held 65 direct investments in Slovenia and 43 direct investments in Romania. By the end of 1999, there were only 10 direct investment holdings in Bulgaria, like in the Baltics. Austrian investors own 22 direct investments in the three accession countries that do not count among the transition economies (thereof 12 in Malta) with only 217 employees but high equity investment totaling EUR 278 million.

Table 2

### FDI Stocks at End-1999:

#### Number, Total Equity and Employees by Regions

Target Country	Number of Direct Investments	Direct Investment Capital EUR million	Employees, Weighted	Employees/Direct Investment	Direct Investment Capital/ Direct Investment EUR million	Direct Investment Capital/ Employee EUR thousand
Hungary	404	1,673	49,288	122	4.1	34
Czech Republic	257	1,291	32,934	128	5.0	39
Poland	105	560	14,487	138	5.3	39
Slovak Republic	101	573	11,774	117	5.7	49
Slovenia	67	558	4,086	61	8.3	137
Romania	43	174	4,797	112	4.0	36
Bulgaria	10	113	1,245	124	11.3	91
Baltic republics	10	22	370	37	2.2	60
Other accession countries <sup>1)</sup>	22	278	217	10	12.6	1282
Other CEECs	101	531	9,127	90	5.3	58
EU-15	664	8,463	50,360	76	12.7	168
Other European countries	145	1,195	2,614	18	8.2	457
Rest of the world	243	3,607	17,866	74	14.8	02
<b>Total outward FDI</b>	<b>2,172</b>	<b>19,039</b>	<b>199,164</b>	<b>92</b>	<b>8.8</b>	<b>96</b>
Accession countries	1,019	5,242	119,197	117	5.1	44
Other countries	1,153	13,797	79,966	69	12.0	173

Source: OeNB.

<sup>1)</sup> Malta, Cyprus, Turkey.

1 Direct investment is recorded above a threshold value of roughly EUR 72,000 per nominal capital holding. Experience with the use of the threshold value has shown that the number of direct investment stakes would be 50% higher if the threshold value were disregarded; however, the threshold value has only a negligible effect on the value and on the employment figure (less than 5%).

This first overview already illustrates how important the accession countries are for Austria's active internationalization efforts. The number of direct investments in Hungary and the Czech Republic alone is just about equal to the number of Austria's direct investments in the entire EU, and as many employees work in Austria's Hungarian direct investment enterprises alone as in Austrian subsidiaries in the entire EU. However, the weights of the value of the invested capital are completely different. Typically, FDI in the accession countries has a comparatively low capital intensity and – at least in relative terms – a high number of employees.

This pattern also applies to direct investment in Eastern European countries outside the group of accession countries, comprising 101 direct investment holdings that break down as follows: 60 in Croatia, 17 in Ukraine, 14 in Russia and the remainder in the successor states to Yugoslavia and in Albania.

Austria's FDI in European countries outside the EU are located mainly in Switzerland (and additionally in Norway, Jersey and Guernsey). A comparison of the Austrian share of FDI targets outside Europe (number, employees: 10%; total capital: 20%) with that of EU investors in general<sup>1</sup>) clearly shows that geographical distance is an important consideration for typically medium-sized Austrian direct investors – and that the Austrian business landscape lacks bellwether companies with a worldwide scope.<sup>2</sup>)

The importance of distance for Austrian FDI is apparent not just in an international comparison, it may also be demonstrated at the Austrian regional level using the relationship between the Austrian province in which the direct investor is located with the target country (table 3). A comparison of the target country structure by province with the average for Austria as a whole reveals a decided preference for investment in the immediately adjacent countries. Thus investors located in Burgenland have most of their equity stakes in Hungary, Lower Austrian investors in the Czech Republic and in Slovakia, and Carinthian investors have the highest concentration of FDI in Slovenia and the remaining CEECs (primarily Croatia). Of course, Vienna with its 931 direct investments strongly influences the average, but a marked tendency toward FDI in the East remains. With the exception of Slovenia, all accession countries are somewhat overrepresented, whereas Western Europe – and surprisingly FDI targets outside Europe – are underrepresented.

Tyrol and Vorarlberg have the most pronounced orientation toward FDI in Western Europe, with Tyrol occupying the top position in the orientation toward the EU (54%, with FDI focused above all on Italy and Germany), whereas Vorarlberg exhibits a strong orientation toward FDI in Switzerland. Upper Austria also displays strong FDI links to EU Member States (above all to Germany); at the same time it has more investment stakes in the Czech Republic than the other provinces do. Styria's FDI in Slovenia and Croatia (other CEECs) is somewhat above average, whereas direct investors from Salzburg exhibit no clear regional preference. Although 83 of 243 Austrian FDI stakes outside of Europe as per December 31, 1999, were held by direct investors located in Vienna, in relative terms FDI stemming from Vorarlberg, Tyrol

1 EU Member States have invested more than 40% of their FDI capital outside of Europe. Eurostat (2000, p. 98f).

2 See Clement (2001).

Table 3

**Outward FDI by Austrian Province and by Target Country in 1999**

Target Country	Vienna	Styria	Upper Austria	Salzburg	Tyrol	Carinthia	Vorarlberg	Burgenland	Lower Austria	Provinces Total
	%									
Hungary	20	17	12	19	8	30	12	73	18	19
Czech Republic	13	6	14	9	4	13	3	3	16	12
Poland	6	3	5	3	5	2	2	10	5	5
Slovak Republic	6	2	2	7	0	4	1	3	7	5
Slovenia	3	7	2	4	0	9	0	3	2	3
Bulgaria, Romania	3	3	2	1	0	2	1	3	2	2
Baltic republics	1	0	1	0	0	0	0	0	0	0
Other accession countries <sup>1)</sup>	2	1	1	1	0	0	0	0	1	1
Other CEECs	5	8	2	3	0	10	6	0	4	5
EU-15	27	31	40	34	54	23	35	3	28	31
Other European countries	5	4	7	10	12	4	21	0	5	7
Rest of the world	9	17	14	10	16	3	19	0	12	11
Number = 100%	931	186	321	135	74	94	117	30	284	2,172

Source: OeNB.

<sup>1)</sup> Malta, Cyprus, Turkey.

and Styria covers the broadest dimension. Investment outside of Europe refers mainly to investment in the U.S.A., Canada and Australia.

Distance seems to have a third influence as well, namely on the type of business activity. If corporations are classified by whether they are mainly vertically structured (as defined by Helpman), with FDI triggered chiefly by different factor endowments and hence varying costs of primary inputs, or whether they are horizontally integrated corporations (as defined by Markusen and Venables), with FDI in countries with similar factor endowments based on different transport and transaction costs,<sup>1)</sup> horizontal integration appears to play a surprisingly large role for the branch structure of Austrian outward FDI in the accession countries considering the different wage levels.

Table 4 compares total Austrian outward FDI with that of the EU (columns 1 and 2) and shows the structure of Austrian direct investment in the 13 accession countries compared to the remaining total of Austrian FDI (columns 4 and 5). FDI is broken down by the sector to which the direct investment enterprise belongs (NACE, the General Industry Classification of Economic Activities within the European Communities),<sup>2)</sup> and the capital invested is shown.

In primary production, direct investment in agriculture and forestry is nearly nonexistent, which comes as no surprise considering that stringent laws restrict purchases of agricultural land in many countries. However, in general direct investment in mining is significant, though not for Austrian investors, which is a first sign that Austrian direct investors do not conform to the perception of multinational enterprises with an internationally fragmented production process covering all stages from the extraction of raw materials to the sale of the final product. Direct investment in energy, gas and water supply is just as low; the Austrian direct investment statistics combine this sector and mining. There is little FDI in this area, most likely because the enterprises in this sector are predominantly publicly owned, which, apart from FDI in jointly operated

1 Egger and Pfaffermayer (2000).

2 Unfortunately, the Eurostat and the NACE breakdowns (columns 2 and 6) are not fully identical despite providing the same totals; explanations are provided in the analysis of the sectoral breakdown.

Table 4

**Sectoral Breakdown of Austrian Direct Investment Enterprises**

**Abroad in Terms of Invested Capital at End-1999**

Sector of the Direct Investment Enterprise	Active DI		NACE Section or Subsection	Comment	Active DI Austria		
	EU-15	Austria			Accession countries	Rest of the world	Total
	1	2			4	5	6
	%			%			
Agriculture and fishing	0.1	0.0	A+B		0.0	0.0	0.0
Mining and quarrying	6.8	1.3	C	+E	1.4	2.3	2.1
Manufacturing	35.1	25.4	D		35.3	21.7	25.4
Food products	4.5	2.0	DA		5.9	0.5	2.0
Textiles and wearing apparel			DB	+DC	1.2	0.3	0.5
Wood			DD		0.6	1.5	1.3
Publishing and printing	2.7	3.9	DE		3.1	1.7	2.1
Total petroleum, chemicals and rubber	11.8	4.2	DF-DH		7.4	3.0	4.2
Metal products			DJ		2.8	4.3	3.9
Mechanical products	4.6	5.4	DK		1.1	1.7	1.6
Total office machinery and radio	3.9 <sup>2)</sup>	1.9 <sup>2)</sup>	DL <sup>2)</sup>		2.1 <sup>1)</sup>	3.8 <sup>1)</sup>	3.3 <sup>1)</sup>
Motor vehicles	2.9	0.4	DM		0.8	0.3	0.5
Residual item: Nonmetallic mineral products			DC+DL <sup>1)</sup>				
Manufacturing n.e.c.	4.6	7.6	DI		9.6	4.2	5.7
			DN		0.8	0.2	0.4
Electricity, gas and water	4.0	0.7	E	ad C	x	x	x
Construction	0.6	2.1	F		3.8	1.5	2.1
Trade and repairs	6.7	13.4	G		17.8	11.8	13.5
Hotels and restaurants	0.6	0.7	H		1.9	0.1	0.6
Transport, communications	7.8	0.36	I		0.5	0.3	0.34
Financial intermediation	20.0	21.8	J		29.0	19.0	21.8
Real estate and business activities	16.1	33.6	K		9.6	42.7	33.6
Other services	1.8	0.7	L-Q		0.8	0.6	0.6
	EUR billion				EUR billion		
Total EUR billion	2,380.0	19.04			5.24	13.80	19.04

Source: OeNB, Eurostat.

<sup>1)</sup> Including NACE divisions 31 and 33.

<sup>2)</sup> Excluding NACE divisions 31 and 33.

hydroelectric power plants located on border rivers, has prevented inward and outward direct investment. In fact, these two sectors play an even less important role for FDI in the CEECs than for FDI in all other countries.

Only 25% of Austrian FDI is in secondary production, 10 percentage points less than the EU-15's investment in manufacturing. The largest gap is in FDI in chemicals. Austria has an edge only in technologically seemingly less sophisticated branches, such as the manufacture of textiles, wood and paper, of metals and of a very heterogeneous residual category joining leather manufacturing, construction materials manufacturing, parts of the NACE subsection manufacture of electrical and optical equipment (the category manufacture of electrical

machinery and apparatus and the manufacture of medical, precision and optical instruments, watches and clocks), and the NACE subsection DN (manufacturing n.e.c.). Austrian FDI is below average in the manufacture of transport equipment, the manufacture of electrical and optical equipment (office machinery, manufacture of radio, television and communication equipment and apparatus), as well as in the food industry. To a certain extent, the structure of the direct investment enterprises mirrors the production structure in Austria: There is no real office machinery industry, and no fully fledged domestic transport equipment industry, which shows that the activity of the parent company and its direct investment enterprise is highly correlated.<sup>1)</sup>

An analysis of the share of FDI in manufacturing shows that the 35% weight of Austrian enterprises' FDI in manufacturing enterprises in the accession countries (columns 4 and 5) is much closer to the international standard than the weight of Austrian companies' manufacturing investment primarily in the West. Moreover, the investment share is clearly above the EU average in a few areas, e.g. the food industry (sugar, starch, meat and beer production), the paper industry (including packaging material) and the construction material industry (cement, bricks, glass). In these product groups, the transport cost burden in international trade is relatively high. In the main, these direct investments reflect horizontal integration: regionally limited markets are supplied with local products, and the FDI allows centrally incurred overheads (e.g. for developing new processes or products) to be distributed across larger markets. It is surprising that unlike in the case of German investment in this area, horizontal integration prevails between Austrian direct investors and their direct investment enterprises in the transition countries despite very dissimilar factor endowment.<sup>2)</sup> One reason may be that the Austrian enterprises are simply not large enough to permit active vertical structuring. Austrian companies are likely to be integrated in such worldwide manufacturing processes mainly as passive participants, e.g. as suppliers and parts producers in the automotive industry.

The construction industry is generally overrepresented in Austrian outward direct investment, above all in Eastern Europe; construction companies' activities there do not compete with Austrian domestic manufacturers' business.

Of course, most services also require geographical proximity to markets. Austria's strengths vis-à-vis the EU are in the tertiary sector – above all in trade, real estate, renting and business activities, whereas FDI in transport, storage and communication was negligible at the end of 1999. It should be noted that real estate, renting and business activities include numerous holding companies, which may hamper the interpretation of the figures pertaining to FDI in the West to a certain extent. In the context of FDI in the accession countries, however, holding companies play only a minor role. Real estate development, leasing companies and more traditional services such as advertisement, market research, consulting, cleaning and the like are more important. By contrast, trade and financial intermediation activities are a key area of Austria's FDI in

<sup>1</sup> In nearly half the cases, the parent company and the direct investment enterprise belong to the same production sector; in addition, manufacturing direct investors frequently invest in trade companies abroad (see Dell'mour, 2000, p. 72).

<sup>2</sup> See Altzinger (2000, p. 24).

the East. Trade companies account for 18% of the capital invested in the accession countries, and financial intermediators for nearly 30%. The rationale behind FDI in trade companies is the expansion of Western European retailer networks and the establishment of wholesalers which mainly sell direct investors' goods. As the figures this study contains for financial intermediation predate the large investments by Erste Bank der oesterreichischen Sparkassen AG in the Czech and Slovak Republics as well as Bank Austria AG's merger with Hypo- und Vereinsbank AG of Bavaria, the reinforced CEE focus of these investments has not yet been taken into account. Considering the saturation of the domestic market and fierce competition in Western Europe, regional expansion into CEE was probably the only viable growth prospect for Austrian banks and insurance companies. In its Financial Stability Report,<sup>1)</sup> the OeNB reports that Austrian commercial banks' activities in CEE had expanded to 38 banks with more than 2,000 offices and 43,000 employees by mid-2001. According to the Financial Stability Report, total assets had already run to EUR 45 billion, and Austrian banks' subsidiaries in Slovenia had market shares of between 5% in Slovenia and 40% in Slovakia at the time.

The answers to the question of the motivation for direct investment clearly signal the enormous role gaining market share and market access plays for investment in Eastern Europe: Direct investors cite market access as the predominant motive for cross-border equity investment (see table 5). More than 70% of all direct investment stems from this consideration, which naturally applies to accession country investment as well.

Table 5

<b>Motive for Outward Direct Investment (1999 Statistics)</b>						
	Labor Cost	Tax Considerations	Market Access (Securing Sales)	Securing Supply (Raw Materials)	Other Reasons/ Several Reasons	Number of Direct Investments
	%					
Accession countries	6.1	0.4	72.4	3.2	17.9	1,019
EU-15	0.6	2.4	70.0	2.0	25.0	664
Rest of the world	1.4	3.5	73.4	3.3	18.4	489
Total	3.4	1.7	71.9	2.9	20.2	2,172

Source: OeNB.

This table also indicates that factor endowments may have represented a key consideration for FDI decisions in a number of cases. 6% of direct investors name labor costs – a less frequently and less willingly cited motive – as their prime impulse for investment in the accession countries. Thus 62 of 73 FDI holdings made to benefit from low labor costs are located in the accession countries. These 62 enterprises, most of which are from the electronics and textiles sectors, employ 25,000 persons (weighted by the direct investor's percentage ownership of the direct investment enterprise's nominal capital share). With an average of 400 employees, these companies are also four times as large as the average direct investment enterprise.

The disproportionately frequent citation of labor costs as a motive for FDI and the complete dismissal of tax grounds are the chief reasons why the differ-

1 OeNB (2/2001, p. 48ff.).

ences have such a high significance (chi square = 78.5 at eight degrees of freedom).<sup>1)</sup>

The fact that labor costs would probably play a role even if they had not been explicitly given as a motive is evident in table 6, which shows Austrian outward FDI by size.

Statistical outliers are not the reason for the different capital and employment levels in the direct enterprises. Both a Mann-Whitney rank sum test<sup>2)</sup> with raw data and the simple chi square test of the classified data point to (highly) significant differences between the size of direct investment enterprises in the accession countries and elsewhere.

Table 6

**Number of Direct Investments by Staff Size**

**and Target Country in 1999**

Target Country	0 to 1	2 to 10	11 to 100	101 to 1,000	over 1,000	N = 100%
	%					
Hungary	17.3	18.8	39.6	22.0	2.2	404
Czech Republic	14.8	14.0	44.7	24.5	1.9	257
Poland	8.6	13.3	51.4	25.7	1.0	105
Slovak Republic	6.9	20.8	37.6	33.7	1.0	101
Slovenia	19.4	31.3	28.4	20.9	0.0	67
Bulgaria, Romania	5.7	9.4	54.7	30.2	0.0	53
Baltic republics	10.0	10.0	70.0	10.0	0.0	10
Other accession countries <sup>1)</sup>	45.5	31.8	22.7	0.0	0.0	22
Other CEECs	6.9	26.7	42.6	22.8	1.0	101
EU-15	23.5	19.4	42.2	14.3	0.6	664
Other European countries	42.8	21.4	31.7	4.1	0.0	145
Rest of the world	25.9	21.0	39.9	12.3	0.8	243
Total	20.2	19.3	41.1	18.3	1.1	2,172

Source: OeNB.

<sup>1)</sup> Malta, Cyprus, Turkey.

Nearly every fifth Austrian direct investment enterprise has more than 100 employees. In the transition countries, more than 25% of the enterprises are large investment, whereas less than 15% of the direct investments in the EU and in the rest of the world fall into this category. 16 of the very large investments (more than 1,000 employees) are also located in the accession countries. In turn, small direct investments with 0 to 1 employee<sup>3)</sup> are underrepresented in the accession countries. The breakdown of employment in the Mediterranean accession countries and the "other CEECs" follows a pattern atypical of the other countries in the respective groups: the former exhibit a pattern much like that of FDI in Western countries, whereas FDI in nonaccession CEECs is quite similar to that in the CEECs.

1 The chi square test examines the distribution between binomial variables against the null hypothesis of independence. The test variable chi square is x-square distributed with (n-1)\*(m-1) degrees of freedom.

2 A parameter-free test to test the hypothesis whether two independent random samples stem from populations with identical distribution.

3 Direct investments with a maximum of one employee account for a fifth of all outward FDIs. Frequently, these investments are holding companies.

## 2.1 Direct Investment Income

Direct investment may make sense theoretically if it helps boost the direct investor's earnings even if the direct investment enterprise itself makes a loss,<sup>1)</sup> but as a rule, the direct investment enterprise is expected to make a profit. As the foundation of an enterprise is frequently associated with startup losses, the age of the direct investment enterprise provides valuable information.

Only 7% of the outward FDI holdings recorded at the end of 1999 had been established before the opening up of Eastern Europe in 1989. Most of these direct investments were located in Western Europe, some were overseas. It may come as a surprise that there were direct investments in the former Eastern Bloc even before the fall of the Iron Curtain. In the 1980s direct investors found opportunities for outward investment above all in Hungary, with construction, hotel projects and banks counting among the pioneer projects that have survived to the present day.

Table 7

	Hungary	Czech Republic	Other Accession Countries	Total Accession Countries	Other CEECs	EU-15	Other European Countries	Rest of the World	Total
until 1970	0	1	1	2	0	20	6	7	35
until 1980	0	0	1	1	0	40	13	19	73
until 1988	12	2	2	16	2	81	16	32	147
1989	21	3	2	26	0	42	5	9	82
1990	57	7	14	78	2	52	20	10	162
1991	62	26	25	113	2	50	6	9	180
1992	54	58	23	135	1	47	10	14	207
1993	38	44	48	130	6	51	6	8	201
1994	40	26	42	108	10	39	5	14	176
1995	34	21	41	96	7	47	11	22	183
1996	20	17	38	75	19	38	16	24	172
1997	22	18	46	86	18	47	10	20	181
1998	21	18	49	88	17	58	9	23	195
1999	23	16	26	65	17	52	12	32	178
Total	404	257	358	1,019	101	664	145	243	2,172

Source: OeNB.

The opening up of Eastern Europe kicked off investment, first in Hungary, above all from 1990 to 1992, followed by a flurry of new investment in the Czech Republic and Slovakia from 1991 to 1994.<sup>2)</sup> This also applies to the non-accession transition countries, such as Ukraine or Russia. Direct investment enterprises began to be established only very recently in the successor states to Yugoslavia<sup>3)</sup> (Slovenia, where direct investment dates to 1991, represents an exception). The drop in the number of new investments in the accession countries only partly contradicts the steady high stream of investment and the record investment made in this region in 2000 and 2001, as the amounts invested are larger because the risk has become easier to gauge, not least

1 Options are, e.g., the use of nonmarket transfer prices in intragroup trade or a hidden transfer of profit generated by license or management fees.

2 Investment in the ČSSR and the ČSFR were classified by the respective successor countries.

3 The establishment periods are naturally closely linked to the creation of suitable framework conditions in the individual transition countries, but the lack of direct investment in Poland and the Baltic republics, which were open to direct investment quite early, may be seen as a further argument supporting the claim that distance matters.

because of the prospect of EU accession in the near future. Moreover, considerable investment or reinvestment goes toward expanding existing direct investment enterprises in the target regions.

Austrian investment in the EU and the remaining Western European countries is fairly evenly distributed over the years, whereas investment outside Europe gained momentum in the second half of the 1990s. As most of the FDI both within and outside the enlargement region was made by 1993, a comparison of the profitability of both regions should no longer be substantially influenced by the lower age of many direct investment enterprises in the accession regions.

Most of Austrian investment in the accession countries consists of takeovers or holdings in existing companies. While this is generally true of all Austrian outward FDI – only 40% of all direct investment go into establishing a new company abroad – the share of greenfield investment in the accession countries is clearly lower at one third of all investment.<sup>1)</sup> The reason for this low investment figure is that numerous investments were made within the framework of programs to privatize formerly nationalized firms. The reorganization measures required for such investments, however, may be nearly as extensive as the establishment of a new enterprise.

By 1999, Austrian FDI in the accession countries had become very profitable (table 8). This applies to all accession countries with the exception of Bulgaria, Romania and the Baltic republics. Total annual profit (excluding profits and losses carried forward) ran to about EUR 440 million. More than half of the profit was reaped from direct investments in Hungary, but direct investments in the Czech Republic, Poland, Slovenia and Slovakia each contributed from EUR 40 million to EUR 60 million to total profits. The annual profits translate into an average return on equity of 10.4%. 703 – or nearly 70% – of a total of 1,019 direct investment enterprises in the accession countries posted no losses.<sup>2)</sup>

Consequently the profitability of direct investments in the accession countries was even above average in 1999. By way of comparison, the share of profitable investments outside the accession countries was 2 percentage points lower. While at EUR 690 million the total profit made outside the accession countries was higher, the return on equity was only half as high at 5.7% because the equity capital was considerably higher.

The profitability of direct investments was not always substantial in the accession countries, however. Table 8 shows the development of profitability since the fall of the Iron Curtain. At first, return on equity and the share of profitable direct investments was high because investors opted exclusively for projects with a guaranteed high return in the uncertain period following 1989. After 1991, when a wave of investment in the accession countries began, profitability tumbled, even resulting in net losses between 1993 and 1995.

1 The difference is statistically highly significant (chi square = 31.76 at 2 degrees of freedom). Most of Austria's greenfield investment is located in Germany, Switzerland and Italy.

2 The difference between this figure and the number of profitable enterprises in the direct investment report in the supplement to the OeNB's Focus on Austria 2/2001 results from the fact that in the supplement the classification is based on annual profits plus profits or losses carried forward from the years before.

During that phase, the percentage of lossmaking operations rose to 45%. In the second half of the 1990s, profitability gained a second wind and has since improved to levels above those measured in Western European and overseas direct investment enterprises. Profitability was boosted, among other things, on the back of the rise in labor productivity (sales per employee) in the primary and secondary sectors from roughly EUR 40,000 to around EUR 70,000.<sup>1)</sup>

Table 8

<b>Profitability of Austrian Outward Direct Investment</b>											
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
<i>Number</i>											
Direct investments											
Total	895	1189	1,239	1,340	1,562	1,698	1,796	1,897	2,020	2,078	2,172
<i>thereof accession countries</i>	120	262	397	496	660	801	847	889	962	977	1,019
<i>other countries</i>	775	927	842	844	902	897	949	1,008	1,058	1,101	1,153
<i>Thereof with an annual profit<sup>1)</sup></i>											
Total	656	809	799	827	942	1,018	1,093	1,266	1,365	1,346	1,477
<i>thereof accession countries</i>	105	210	266	316	380	441	458	573	638	603	703
<i>other countries</i>	551	599	533	511	562	577	635	693	727	743	774
<i>EUR million</i>											
Total profit <sup>2)</sup>											
Total	156	193	-28	-229	-119	189	-95	-486	644	580	1,125
<i>thereof accession countries</i>	7	20	20	9	-20	4	-18	155	288	330	437
<i>other countries</i>	149	173	-49	-239	-99	185	114	331	356	250	688
Return on equity in % <sup>3)</sup>											
Total in %	8.3	6.7	-0.8	-5.0	-2.1	3.1	1.4	-5.9	6.1	4.6	6.9
<i>thereof accession countries</i>	8.7	6.0	2.8	0.9	-1.3	0.2	-0.9	6.3	9.4	9.8	10.4
<i>other countries</i>	8.3	6.8	-1.6	-6.8	-2.4	4.3	2.4	5.8	4.7	2.7	5.7

Source: OeNB.

<sup>1)</sup> Including zero profit.

<sup>2)</sup> Profit or loss for the year excluding profit or loss carried forward.

<sup>3)</sup> Profit or loss for the year divided by (equity minus profit or loss for the year).

Measured as a sum total across all countries, Austrian direct investments posted losses from 1991 to 1993. Apart from the cyclical slump in 1992–93, a few very large losses in the EU and overseas accounted for this result. Only in four countries were Austrian direct investment enterprises able to record unbroken profits in the decade from 1989 to 1999 – Switzerland and Luxembourg, and the two accession countries Malta and Hungary.

### 3 A Breakdown of Direct Investors

Austria's 2,172 outward direct investments were held by 902 domestic direct investors. To explore whether there are any differences between investors, they are broken down by the target region of their direct investment – the accession countries, other countries, or both regions.

347 of 902 Austrian direct investors have direct investments only in the accession countries, 380 have direct investments only outside the applicant countries, and 175 investors are represented in both regions with 461 direct investments in and 466 outside the enlargement region. By definition, direct investors who seek to invest in more than one region must have more than

<sup>1</sup> The comparative value for other direct investment in the West exceeds EUR 150,000.

Table 9

**Direct Investors and Direct Investments**

**by Target Regions at End-1999**

Direct Investors with Direct Investments	Direct Investors	Direct Investments	Direct Investments Direct Investor	Staff Direct Investor	Staff Direct Investor
Only in the accession countries	347	558	1.61	71,914	207.2
Only outside of the accession countries	380	687	1.81	99,519	261.9
In both regions	175	927	5.30	86,825	496.1
Total	902	2,172	2.41	258,258	286.3

Source: OeNB.

one direct investment. In fact, approximately two thirds of the investors concentrated on a single region have only a single direct investment abroad; only a fraction of these investors holds more than three investments (7% in the accession countries region, 10% in the rest of the world). By contrast, 56% of the direct investors represented in both regions have four or more direct investments. These direct investors tend to be large companies, as confirmed by the size of their staff; direct investors with several stakes average more than twice as many employees (nearly 500 against 210 and 260).

A special feature of Austrian direct investment is that a considerable portion of outward FDI stems from companies that are direct investment enterprises in Austria themselves. According to the most recent available figures of 1999, 194 Austrian direct investors with FDI in 489 direct investment enterprises were themselves partly or wholly controlled by nonresidents.<sup>1)</sup> Especially just after 1989, Austria's and specifically Vienna's potential role as a gateway for business activities in the transition countries played an important role in economic policy discussions.<sup>2)</sup> Austria continues to play the role of a gateway to the East, as the 1999 data show (table 10).

Whereas nearly 23% of all Austrian outward FDI and 32% of the employees abroad are partly or wholly foreign-controlled,<sup>3)</sup> the share in the accession countries is significantly higher (chi square = 13.4 at 2 degrees of freedom; significance < 0.1%). In terms of the number of direct investments, Austrian FDI in the accession countries is 3 percentage points higher than the total average, in terms of employees 7 percentage points higher.<sup>4)</sup> Conversely, the degree

1 As explained in the supplement to Focus on Austria 2/2001, table 25 (Austrian Outward and Inward Direct Investment at the end of 1999), "partly controlled" means that a direct investor holds a capital share of at least 10% of the nominal capital of the direct investment enterprise. If "foreign-controlled" is defined to mean a share of at least 50% of the nominal capital, the number of direct investors falls to 153, that of foreign-controlled direct investment enterprises declines to 370. Both cases represent lower-limit cases, as the current statistical system is not suited to capturing control exercised through several linked Austrian companies.

2 See Stankovsky (1996).

3 Altzinger (2000, p. 38) calls such direct investment enterprises "indirect direct investments," an expression we avoid to prevent misunderstandings where first-tier direct investment enterprises themselves invest in second-tier direct investment enterprises and where inward direct investment enterprises themselves own second-tier direct investment enterprises in Austria (see tables 11, 12, 17 and 18 in the supplement to Focus on Austria 1/2001). Generally, such second-tier enterprises are called "indirectly owned direct investment enterprises."

4 The merger between Bank Austria AG and Bayerische Hypo- und Vereinsbank took place in 2000, after the data on which this analysis is based were collected. These transactions raise the number of employees by an additional 15,000 in partly or wholly foreign-controlled direct investment enterprises.

Table 10

**Share and Type of Foreign Ownership of Austrian Direct Investment**

**Enterprises at End-1999**

	Direct Investments	Partly Controlled by Non- residents <sup>2)</sup>	Wholly Controlled by Non- residents <sup>3)</sup>	Number of Employees Weighted	Partly Controlled by Non- residents <sup>2)</sup>	Wholly Controlled by Non- residents <sup>3)</sup>
	Number (= 100)	in %		Number (= 100)	in %	
Hungary	404	25	19	49,288	41	33
Czech Republic	257	27	21	32,934	38	31
Poland	105	30	28	14,487	37	36
Slovak Republic	101	28	18	11,774	38	30
Slovenia	67	22	13	4,086	34	29
Bulgaria, Romania	53	34	30	6,041	32	30
Baltic republics	10	40	30	370	27	25
Other accession countries <sup>1)</sup>	22	14	9	217	19	19
Other CEECs	101	25	18	9,127	33	23
EU-15	664	18	14	50,360	18	15
Other European countries	145	19	14	2,614	16	6
Rest of the world	243	24	17	17,866	32	30
Total outward FDI	2,172	23	17	199,164	32	27
Accession countries	1,019	26	20	119,197	39	32
Other countries	1,153	20	15	79,966	23	19

Source: OeNB.

<sup>1)</sup> Malta, Cyprus, Turkey.

<sup>2)</sup> The direct investment in the Austrian direct investor is higher than 10%.

<sup>3)</sup> The Austrian investor is more than 50% owned by a nonresident direct investor.

of foreign control on direct investment in the EU and the remainder of Europe is very low at 18% to 19% of the investments and only 16% to 18% of the employees; using Austria as a springboard for market entry in Eastern Europe appears to make more sense than for market entry e.g. in the EU. Investment outside of Europe lies close to the average within both extremes. Here it becomes apparent again that direct investment in non-Eastern European applicant countries follows a pattern more like that of existing investment in the EU rather than investment in Eastern Europe. By contrast, foreign control of direct investment in nonaccession transition countries (other CEECs) is also high, so that a classification by Eastern and Western European investment would provide good discriminatory power of Austria's use as a launching pad for investment.

#### 4 The Potential Impact of Enlargement

As Austria has substantial holdings in Eastern Europe, the prospective enlargement of the EU is of particular interest for Austria.<sup>1)</sup> It would be very difficult to quantify the impact of enlargement for Austrian investors and their enterprises in the accession countries, however. Generally speaking, investor risk declines in countries that join the EU. Hence, investment is likely to gain momentum. The current record investment of the years 2000 and 2001 may thus be considered a taste of things to come. Eastern Europe expert Fritz Breuss has presented model-based calculations according to which stepped-up demand for capital to invest in the accession countries will hike interest rates in the euro

<sup>1</sup> In fact, Austria's position might best be characterized as that of an important financial services provider at the center of Europe combined with that of a gateway for multinational groups seeking to gain a foothold in the transition region.

area by 0.05 to 0.2 percentage point, which could crowd out – albeit to a small extent – investment in EU Member States. Enlargement might also simply cause Austrian outward FDI to be redirected from the rest of the world to Eastern Europe. Wilfried Altzinger, too, expects only small effects, pointing out that the privatization process of the 1990s was a one-off development that had already been concluded in most of the accession countries.

Theoretically, the integration of the accession countries and the removal of tariff and nontariff trade barriers should raise the welfare of all parties on the back of trade generated by the accession. The expected macroeconomic utility will not be evenly distributed among all economic agents; there are bound to be some losers among the accession country enterprises. Companies that stand to suffer are noncompetitive domestic companies<sup>1)</sup> and companies founded solely to circumvent import restrictions. Such companies lose their locational advantage when accession countries join the EU. However, spurious motives are not likely to have played a role for accession country investment, not just by Austrian direct investors, as most of the countries lifted trade restrictions very soon to prepare for EU membership. Once the companies in the accession countries feel the pressure of heightened competition on accession, firms that can draw on the know-how and the capital reserves of parent companies in the West will have an edge on other firms.

The CEECs' membership in the EU might also have an effect on Austria's gateway role for international groups. Transnational groups might opt to bypass Austria and invest directly, establishing locations as regional head offices farther east in the new Member States. These challenges to Austria as a business location are of course not new, and Austria's well-known advantages – from basic features such as political stability, a good communications and transport infrastructure, cultural proximity to the markets, a readily available qualified labor force and favorable tax conditions, to general life quality aspects such as culture and entertainment, or a healthy environment – will continue to provide a solid foundation for success in competition as a business location in the future. In any event, no large-scale shifts of investment away from Austria have taken place yet. If Austria is to remain a preferred gateway for direct investment, it will have to alter framework conditions steadily to keep abreast of developments.

By way of conclusion, Austrian companies had still displayed a large lag in outward FDI in 1988, but then benefited rapidly and intensely from the opening of Eastern Europe for direct investment. Even small and medium-sized companies received a chance to invest relatively close by. With the development of new markets representing companies' decisive motive for direct investment, no export substitution occurred, nor did any production shifts cause perceptible job losses. Most of the investments were made in the form of acquisitions in the course of the privatization process, and after overcoming some startup problems, the direct investment firms in the accession countries have become more profitable than the average. The prospective accession of the applicant countries to the EU will trigger a wave of further investment, though limited, and above all, it will give the existing direct investment enterprises an additional boost.

1 “Domestic” refers to non-foreign-owned companies located in the accession countries.

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