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## The Black Sea Region – Economic Trends and Role for Austria's External Sector

Due to its geographical location, its natural resources, its market potential as well as its labour pool the Black Sea region is gaining increasing importance. Owing to the dynamic expansion of their demand, the countries in the region, especially Turkey, offer a considerable market potential for Austria's exporters. Austria's good foreign trade relations with the Black Sea region could be strengthened further. In 2009, exports of goods to this region amounted to € 1.5 billion or 1.5 percent of Austria's total exports of goods. After the decline during the economic crisis they are on an upward trend again. Austrian companies are very competitive in the Ukraine. The close match of the Austrian export structure and the Ukraine's and Turkey's import demand points to a substantial short-term export potential.

This article summarises the findings of a WIFO study commissioned by the Federal Ministry of European and International Affairs and the Federal Ministry of Economy, Family and Youth: Karl Aiginger, Stefan Ederer, Jakob Prammer, Susanne Sieber, Österreichs außenwirtschaftliche Beziehungen zur Schwarzmeerregion und deren wirtschaftliche Perspektiven (June 2010, 104 pages, € 50, free download: <http://www.wifo.ac.at/www/pubid/39891>) • The authors are thankful to Peter Huber for useful and constructive comments. The data were processed and analysed with the assistance of Irene Langer, Martha Steiner, Gabriele Wellan • E-mail addresses: [Stefan.Ederer@wifo.ac.at](mailto:Stefan.Ederer@wifo.ac.at), [Susanne.Sieber@wifo.ac.at](mailto:Susanne.Sieber@wifo.ac.at)

As various initiatives and strategies (e.g., "Eastern partnership", accession negotiations with Turkey; *Federal Ministry of Economy, Family and Youth*, 2010) show the EU has aimed at deepening its relations with the Black Sea region for several years. Besides the location at the crossroads of Europe, Central Asia and the Middle East the Black Sea region's market potential and labour pool offer economic opportunities. For companies from Austria the geographical proximity is an additional advantage (distance from Vienna: Kiev 1,050 kilometres, London 1,200 kilometres). After the successful intensification of economic relations with Central and Eastern Europe (Sieber, 2010, Wolfmayr, 2010), the Black Sea region therefore seems another obvious destination for enhanced international activities of the Austrian economy. For several years the centre of gravity of Austrian companies' presence in Central and Eastern Europe has shifted to more remote markets: shortly after the opening of Eastern Europe the focus was mainly on neighbouring regions (Hungary, the Czech Republic, Slovakia and Slovenia), in which Austria soon played a pioneering role. In recent years there has been an increasing interest in Romania, Bulgaria or the West Balkans, too. An expansion of the activities into the Black Sea region could now follow as a next step.

This analysis of macroeconomic trends in the Black Sea region, Austria's foreign trade relations with the countries of the region and its potential for Austria's exporters refers to the following countries: Armenia, Azerbaijan, Georgia, Moldova, Ukraine and Turkey<sup>1</sup>. Armenia, Azerbaijan and Georgia are grouped together as "Caucasus".

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<sup>1</sup> Besides the countries mentioned above the "Integrated Regional Programme for the Black Sea Region" initiated by the federal government as part of its "Internationalisation Drive" also includes the region of Krasnodar in its definition of the Black Sea region. Other definitions include the whole of Russia. Inter alia Romania and Bulgaria are represented in the Black Sea Economic Cooperation (BSEC). However, as EU countries they are not counted among the countries of the Black Sea region here.

The Black Sea region cannot be called a homogeneous economic area. The economies differ in several aspects. With the exception of Turkey, they all emerged from the USSR and went through a lengthy and profound transformation process, which, in part, is still ongoing. The initial situation in the 1990s differed widely, particularly in terms of the decline in industrial production and the per capita income after independence. In the 2000s at the latest all countries experienced – partly high – economic growth, but the turning points and the momentum of the expansion differed. Therefore, in some countries, the income level is already much higher than it was in 1989, whereas in others it remains substantially below that benchmark. The global economic crisis partly reversed the catching-up process in the Black Sea region. By now all economies of the region are in an upswing and expanding strongly again. Yet, GDP has not reached its pre-crisis level in all countries.

Turkey is by far the largest economy in the region. It accounts for about three quarters of economic activity and half the population. The second-largest economy, the Ukraine, accounts for 15 percent of GDP and one third of the population. The remaining 10 percent of GDP and 15 percent of the population are the combined shares of the four small countries of the Black Sea region: Armenia, Azerbaijan, Georgia and Moldova. Turkey's GDP is equivalent to 6 percent of the EU 27 GDP and half of the aggregate of the six Central and Eastern European countries (Bulgaria, Poland, Romania, Slovakia, the Czech Republic, Hungary; Table 1).

## Economic development of the Black Sea region

Table 1: The Black Sea region at a glance

		Population In 1,000	GDP Billion \$	GDP at purchasing power parity		Per capita GDP at purchasing power parity		In \$	EU 27 = 100	CEEC 6 = 100
				Billion \$	EU 27 = 100	CEEC 6 = 100				
Black Sea region	2007	135,091	848.8	1,329	9.0	88.0	9,834	33	61	
	2009	136,441	799.6	1,302	8.8	82.0	9,539	32	56	
Armenia	2007	3,227	9.2	17.2	0.1	1.1	5,328	18	33	
	2009	3,267	8.5	16.3	0.1	1.0	4,983	17	29	
Azerbaijan	2007	8,802	33.1	68.6	0.5	4.5	7,792	26	48	
	2009	8,977	43.1	85.6	0.6	5.4	9,540	32	56	
Georgia	2007	4,395	10.2	20.6	0.1	1.4	4,680	16	29	
	2009	4,385	10.7	20.8	0.1	1.3	4,754	16	28	
Moldova	2007	3,581	4.4	9.7	0.1	0.6	2,720	9	17	
	2009	3,568	5.4	10.1	0.1	0.6	2,839	10	17	
Turkey	2007	68,894	649.1	888.8	6.0	58.9	12,901	43	79	
	2009	70,538	614.5	879.3	6.0	55.4	12,466	42	73	
Ukraine	2007	46,192	142.7	323.7	2.2	21.4	7,007	23	43	
	2009	45,706	117.4	289.3	2.0	18.2	6,330	21	37	

Source: EBRD, Eurostat, IMF, national sources. CEEC 6: Bulgaria, Poland, Romania, Slovakia, Czech Republic, Hungary.

The countries differ significantly not only in terms of their size, but also in terms of their income levels. Turkey's per capita GDP is equivalent to 40 percent of the EU average and 70 percent of the average of Central and Eastern Europe. With a per capita income of about 30 percent of the EU average Azerbaijan is the second richest country in the region – primarily because of its abundant crude oil and natural gas deposits. In the other countries the income level ranges between 10 percent and 20 percent of the EU level or between 15 percent and 35 percent of the Central and Eastern European level. According to the World Bank between 20 percent (Ukraine) and 55 percent (Georgia) of the population live below the poverty line.

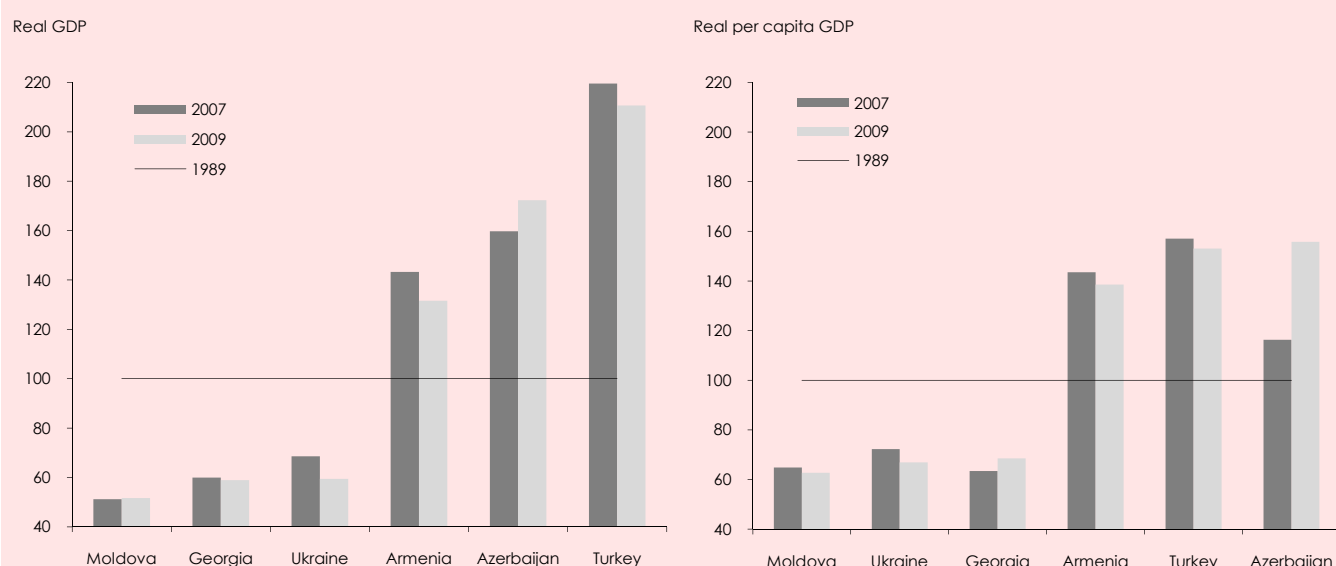
Those countries of the Black Sea region that emerged from the USSR underwent a transformation process after 1989, which varied considerably in duration and scope. In the Caucasus countries (Armenia, Azerbaijan and Georgia) the ensuing production decline already came to a halt in the mid-1990s and was followed by steady growth, which persisted until the onset of the economic crisis of 2008. Armenia

## Trends of production and demand

passed the trough in 1994, Georgia in 1995 and Azerbaijan in 1996. In Moldova and in the Ukraine, by contrast, the production decline continued until 1999, economic growth did not set in until 2000. Especially from the mid-2000s onwards growth in Armenia, Azerbaijan and Georgia gained considerable momentum. The rapid development of the oil and gas sector in Azerbaijan resulted in average annual GDP growth rates of almost 30 percent from 2004 to 2007. Armenia (14 percent) and Georgia (10 percent) also recorded double-digit growth rates. In the Ukraine and in Moldova economic activity expanded by annual averages of 6 percent and 5 percent, respectively. As the economy returned to a growth path relatively soon after the transformation from a planning economy into a market economy, the level of overall production in Armenia and Azerbaijan already exceeded that of 1989 by 30 percent and 70 percent, respectively, in 2009 (Figure 1). Georgia's economy contracted much more sharply after the dissolution of the USSR. The following expansion phase, too, turned out much weaker until 2005 than in the other two Caucasus countries. In Moldova and the Ukraine the decline has not yet been offset either, because the expansion started later than in the other countries. In all three countries GDP in 2009 was more than 40 percent lower than in 1989.

Figure 1: Trends of GDP and prosperity

1989 = 100



Source: EBRD, national statistical offices.

Turkey as the only country which did not emerge from the USSR experienced a completely different economic development. The 1990s and 2000s were characterised by robust growth, which, however, was interrupted by several recessions (1994, 1999, 2001). On average, GDP expanded by 6½ percent. As a consequence economic activity doubled compared to its level of 1989. Due to the strong population growth, however, the average per capita income rose by only 50 percent during this period.

Growth drivers vary within the region. In Armenia and Georgia remittances from abroad – especially from migrants employed in the Russian construction industry – increased substantially in the years before the crisis. According to the IMF (2009) they amounted to about 9 percent (Armenia) and 6 percent (Georgia) of GDP in 2008. In Armenia the remittances were primarily directed into private residential construction. Gross fixed capital formation thus increased sharply and reached 37 percent of GDP in 2007. By contrast the export ratio declined significantly and was the lowest of the region at slightly below 20 percent in 2007. This reflects the strong domestic orientation of the Armenian economy (Table 2). From 2000 to 2007 the share of the construction sector in value added increased by 16 percentage points, that of manufacturing halved to 10 percent. The change of the production structure has

been significant in Armenia, too, but the share of its agricultural sector exceeded the average of the other countries at 20 percent in 2007. In Georgia the private remittances from abroad were used above all for private consumption expenditures. A strong inflow of direct investment translated into a continuous growth of investment and exports. The export ratio increased to about 30 percent between 2000 and 2007. The government sector was expanded significantly and reached roughly 20 percent of the country's GDP before the crisis. In Georgia the economic structure shifted towards the service sector. The share of manufacturing remained constant, that of construction doubled, but its weight in overall value added remains relatively small (Figure 2).

Table 2: Changes in the structure of demand since 2000

		Private consumption	Government consumption	Gross fixed capital formation	Exports	Imports
Percentage shares in GDP, value						
Armenia	2000	96.7	11.8	18.4	23.4	50.5
	2007	71.6	10.2	36.9	19.2	39.2
	2009	81.2	12.6	32.7	15.5	43.4
Azerbaijan	2000	70.1	9.5	23.1	39.0	38.4
	2007	33.4	9.7	21.4	68.1	28.5
	2009	43.2	12.9	18.2	53.2	27.5
Georgia	2000	80.5	8.5	25.4	23.0	39.7
	2007	70.7	21.9	25.7	31.2	58.0
	2009	81.6	24.5	15.3	29.7	48.9
Moldova	2000	88.4	14.7	15.4	49.6	76.6
	2007	93.5	19.9	34.1	45.6	97.1
	2009	88.7	24.1	22.5	36.8	73.4
Turkey	2000	70.5	11.7	20.4	20.1	23.1
	2007	71.3	12.8	21.4	22.3	27.5
	2009	71.5	14.7	16.9	23.2	24.4
Ukraine	2000	57.0	18.6	19.6	62.4	57.4
	2007	59.6	17.9	27.5	44.8	50.5
	2009	64.5	20.2	18.3	46.4	48.1

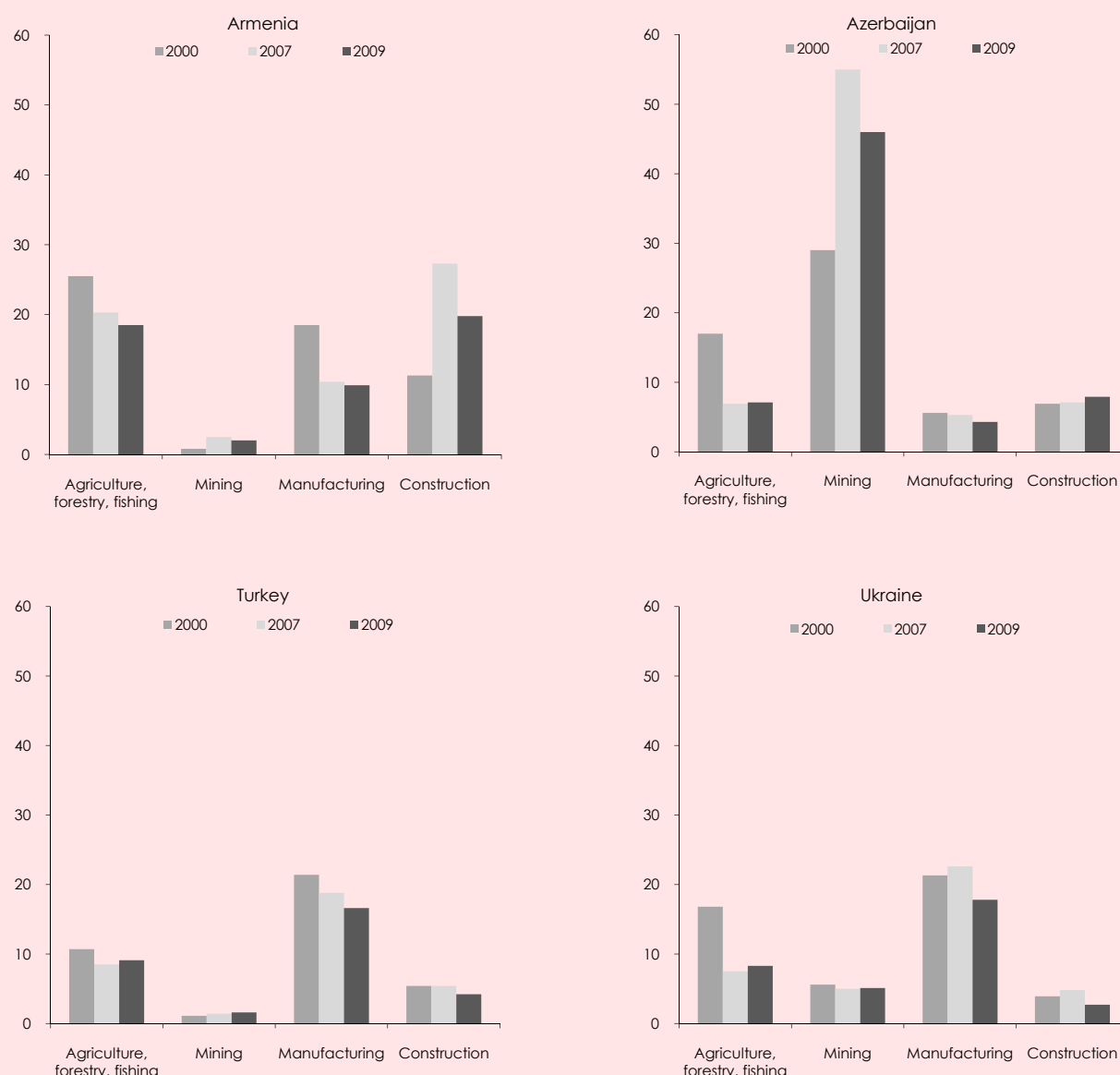
Source: National statistical offices, UN.

In Azerbaijan, growth was driven by the strong expansion of crude oil and gas extraction. Since 2000 crude oil exports have been more than doubled. As a consequence, the share of exports in GDP increased from 40 percent (2000) to 70 percent (2007), that of private consumption shrank from 70 percent to 30 percent during the same period. Investment of the mineral oil industry expanded strongly particularly until 2005. Then its growth slowed. In 2007, the investment ratio was about 20 percent of GDP. Mining (including crude oil and gas extraction) thus accounts for half of Azerbaijan's total value added. Construction, manufacturing and the service sector are less important.

In contrast to the other countries of the Black Sea region Turkey is a large closed economy with export and import ratios of only 25 percent. The share of private consumption in GDP amounts to 70 percent, that of gross fixed capital formation is 20 percent. Domestic demand thus plays a crucial role for growth. Between 2000 and 2007 the demand structure remained largely constant: consumption, gross fixed capital formation and exports expanded evenly. Imports rose strongly due to buoyant domestic demand. Before the crisis the current account exhibited a relatively high deficit of 6 percent of GDP. Turkey's development in the past decade coincided with a rapid change in its production structure: the share of agriculture in value added declined markedly, the contributions of manufacturing and construction remained largely constant, that of services increased.

Figure 2: Change of the production structure since 2000

Percentage shares of the sectors in nominal value added



Source: National statistical offices, UN.

Prior to the crisis growth in the Ukraine was largely driven by domestic demand. Private consumption and investment increased at double-digit rates during most of the time, their share in GDP rose continuously. By contrast foreign trade perceptibly declined in importance. In the Ukraine, too, the production structure changed. The share of agriculture was halved to 7 percent of GDP between 2000 and 2007. At the same time the share of manufacturing remained constant and, at 23 percent, was the highest of the region.

In Moldova the combined share of private and government consumption and gross fixed capital formation in GDP is almost three times as high as that of exports. However, an enormous share of demand leaks abroad: in 2007, the import ratio reached 97 percent. At almost 15 percent the share of manufacturing in value added exceeds that of the Caucasus countries.

At roughly 45 percent of the region's exports and 35 percent of its imports the EU is its most important trade partner ahead of Russia (exports 9 percent, imports 18 percent). However, the structure of foreign trade differs substantially within the region:

with export shares between 20 percent and 25 percent the Ukraine, Armenia and Moldova are more strongly oriented towards Russia than the other countries. Azerbaijan exports almost exclusively crude oil and natural gas. Thus, besides the EU (55 percent) the USA also play an important role as trade partner. For the whole region China and other emerging economies are largely insignificant as export destination.

With the exception of Azerbaijan the economic crisis was accompanied by a fall in GDP in all countries of the Black Sea region. In 2009, the strongest GDP decline over the previous year was recorded by Armenia and the Ukraine (almost -15 percent; Figure 3). In Armenia the reason for this was the almost complete drying up of remittances from abroad. Due to the recession in Russia many migrants employed in the construction sector there lost their jobs and returned to Armenia. As, before the crisis, the remittances had flown into residential construction (see above), the latter collapsed. From 2007 to 2009 the share of gross fixed capital formation in GDP declined by 4 percentage points. The share of construction in value added shrank as drastically. By contrast, private consumption remained largely stable and supported economic activity. In the Ukraine the economic crisis was combined with a typical currency crisis. In the fourth quarter of 2008 the hryvnia devalued by 25 percent. Confidence in the banking sector had dwindled sharply. As a consequence private households exchanged their savings into foreign currency. In its attempt to support the hryvnia, the central bank lost the bulk of its foreign currency reserves. Investment fell dramatically, especially in manufacturing and construction.

### Economic crisis also hits the Black Sea region

Figure 3: Economic growth since 1997

Real GDP, percentage changes from previous year



Source: EBRD, IMF, 2010: forecast of January 2011.

In Turkey the global economic crisis was transmitted via foreign trade to the domestic economy. Exports and subsequently investment collapsed in the first half of 2009. By contrast, consumption, which accounts for the lion's share of GDP, declined only slightly, thus stabilising economic activity. The drastic reduction of imports improved the current account and also helped to mitigate the impact of the crisis. In 2009, GDP declined by 4.7 percent compared to the previous year. Construction and manufacturing were hit hardest, whereas value added of agriculture was expanded.

Azerbaijan is the only country, where GDP expanded rapidly even during the economic crisis (+9.3 percent in 2009), but growth slowed substantially compared to previous years. This was mainly due to the dynamics of the oil price, which, as in 2007-08, surged again in 2009. This boosted revenues of the crude oil and natural

gas sectors and facilitated a renewed expansion of investment. In Moldova, by contrast, the decline in economic activity was relatively pronounced at 6.5 percent in 2009 (Table 3).

Table 3: Macroeconomic performance since 2005

	Armenia	Azerbaijan	Georgia	Moldova	Turkey	Ukraine
	Annual percentage changes					
Real gross domestic product						
Ø 2004-2007	+ 13.6	+ 28.6	+ 10.4	+ 5.1	+ 6.6	+ 5.9
2008	+ 6.9	+ 10.9	+ 1.9	+ 7.3	+ 0.7	+ 2.3
2009	- 14.2	+ 9.3	- 3.6	- 6.5	- 4.7	- 14.8
2010	+ 4.0	+ 5.0	+ 5.5	+ 6.5	+ 8.0	+ 4.5
Consumer prices						
Ø 2004-2007	+ 2.7	+ 11.5	+ 8.9	+ 12.3	+ 8.8	+ 11.8
2008	+ 9.0	+ 20.8	+ 10.0	+ 12.7	+ 10.4	+ 25.2
2009	+ 3.5	+ 1.5	+ 1.7	+ 0.0	+ 6.3	+ 15.9
2010	+ 8.1	+ 5.7	+ 7.1	+ 7.5	+ 8.6	+ 9.8
	As a percentage of total labour force					
Unemployment rate						
Ø 2005-2007	7.6	7.0	13.6	6.7	10.1	6.8
2008	6.3	6.1	16.5	4.0	10.9	6.4
2009	6.8	6.0	16.9	6.4	14.0	8.8
2010	7.0	6.0	16.8	7.5	11.0	8.8
	As a percentage of GDP					
Current account balance						
Ø 2005-2007	- 3.1	15.4	- 15.3	- 11.4	- 5.5	- 0.8
2008	- 11.8	35.5	- 22.7	- 16.3	- 5.7	- 7.1
2009	- 16.0	23.6	- 11.7	- 8.1	- 2.3	- 1.5
2010	- 14.6	24.1	- 12.0	- 11.2	- 5.2	- 0.4
Net borrowing (-)/net lending (+) of general government						
Ø 2005-2007	- 2.1	1.8	2.1	0.5	- 0.5	- 1.9
2008	- 1.8	20.0	- 2.0	- 1.0	- 2.4	- 3.2
2009	- 7.8	6.8	- 6.6	- 6.4	- 5.6	- 6.2
2010	- 4.8	13.9	- 5.4	- 5.4	- 3.5	- 5.5
General government gross debt						
Ø 2005-2007	19.8	10.7	27.7	32.4	45.9	14.9
2008	16.2	7.3	27.6	21.3	39.5	20.0
2009	40.6	12.1	37.4	27.6	45.5	34.6
2010	44.8	12.9	46.2	32.6	43.4	39.5

Source: EBRD, IMF, national sources. 2010: EBRD forecast of January 2011.

Due to its deep integration into the world economy the Black Sea region was seriously affected by the economic crisis, but now it is also benefitting from the upswing. In 2010, the economic activity expanded again in all countries, most dynamically in Turkey. The European Bank for Reconstruction and Development (EBRD, 2010) expects a real growth of 8 percent over the previous year. Thus, GDP in Turkey has already exceeded its pre-crisis level. In the other countries of the Black Sea region economic activity is also expanding rapidly again. The decline caused by the crisis has already been offset in Georgia (+5.5 percent) and in Moldova (+6.5 percent). GDP continued to grow markedly in Azerbaijan, but the growth rate decreased compared to the years before the economic crisis. In Armenia and the Ukraine, where GDP fell dramatically, aggregate output remains far below the pre-crisis level despite a strong expansion.

The Black Sea region's future potential demand for Austrian export products depends on the size of the respective economies and on their growth momentum. Thus, primarily those countries whose absolute demand increases most strongly should be chosen as an export market. However, there are no reliable medium-term forecasts for the countries of the Black Sea region. The assumptions about future economic momentum therefore depend on the average growth rates in recent years. If the effect of the economic crisis is to be ignored in the analysis, the period before its outbreak (2000-2007) seems appropriate. A more cautious estimate includes the years of the crisis, because growth was unusually high particularly in the years immediately before crisis and may not be sustainable at this level.

## Outlook and assessment of future potential demand



In terms of the increase of real GDP since 2000 Turkey shows by far the highest demand potential. Its aggregate production rose by about \$ 100 billion until 2007 (at prices and exchange rates of 2000). In the countries with the second and third largest potential, the Ukraine and Azerbaijan, the increases amount to about \$ 20 billion and \$ 10 billion, respectively. Potential demand of Turkey is thus roughly five times as high as that of the Ukraine and roughly 10 times as high as that of Azerbaijan. If the reference period is extended until 2009, the resulting increase is \$ 90 billion for Turkey and \$ 15 billion for the other two countries. The relation would then be 6 : 1.

By contrast, potential demand of the remaining three countries of the Black Sea region – Armenia, Georgia and Moldova – is rather limited due to their small size, although they also exhibited high growth rates before the economic crisis. In Armenia and Georgia real GDP expanded by about \$ 2 billion between 2000 and 2007. In Moldova the increase did not even reach \$ 1 billion. The relation to Turkey is thus 1 : 50 and 1 : 100, respectively. The relation to the Ukraine is 1 : 10 and 1 : 20, respectively. Due to this large difference the inclusion of the crisis years in the reference period hardly changes the picture.

At almost € 1.5 billion in 2009 Austria's exports to the six countries in the Black Sea region amounted to almost 1.5 percent of its total exports. In service exports their weight was slightly smaller (€ 570 million or 1.4 percent). In terms of direct investment the Black Sea region is slightly more important for the Austrian economy: according to preliminary estimates direct investments of € 4.4 billion had accumulated in these countries by 2009. This corresponds to a share of 3.9 percent of the total direct investment stock.

### Austria's foreign economic relations with the Black Sea region

Table 4: Austria's foreign trade in goods with the Black Sea region

	1999	2009	Ø 1999-2007	Ø 2007-2009	2010 <sup>1</sup>	2007	2009
	Million €		Annual percentage changes			Percentage shares in exports to the Black Sea region	
Total exports	60,265.9	93,739.2	+ 8.4	– 9.6	+ 15.8		
Black Sea region	603.7	1,449.3	+ 15.4	– 12.7	+ 34.1	100.0	100.0
Armenia	3.4	52.2	+ 50.6	– 23.9	– 8.4	4.7	3.6
Azerbaijan	2.4	42.0	+ 42.9	+ 0.8	+ 70.8	2.2	2.9
Georgia	2.7	35.1	+ 40.6	– 7.6	+ 17.4	2.2	2.4
Moldova	6.3	29.5	+ 27.4	– 18.1	+ 14.6	2.3	2.0
Turkey	458.7	760.7	+ 9.4	– 10.2	+ 38.6	49.7	52.5
Ukraine	130.1	529.8	+ 24.3	– 15.4	+ 31.2	38.9	36.6
Caucasus	8.5	129.3	+ 45.7	– 13.4	+ 23.2	9.1	8.9
	1999	2009	1999-2007	2007-2009	2010 <sup>1</sup>		
	Million €		Changes in million €				
Total trade balance	– 5,049.6	– 3,834.8	+ 5,475.1	– 4,260.2	– 484.0		
Black Sea region	– 20.7	198.8	+ 489.7	– 270.3	– 30.3		
Armenia	3.4	50.8	+ 79.8	– 32.4	– 4.3		
Azerbaijan	– 28.3	4.7	+ 56.2	– 23.3	– 8.6		
Georgia		28.2	+ 36.2	– 8.6	+ 1.1		
Moldova	– 9.2	18.5	+ 25.4	+ 2.3	+ 1.2		
Turkey	49.1	– 34.2	+ 32.6	– 115.9	+ 202.7		
Ukraine	– 36.3	130.9	+ 259.5	– 92.3	– 222.3		
Caucasus	– 24.3	83.6	+ 172.2	– 64.3	– 11.9		

Source: Statistics Austria. Caucasus: Armenia, Azerbaijan, Georgia; Black Sea region: Caucasus, Moldova, Turkey, Ukraine. – <sup>1</sup> January to November.

In the years before the economic crisis Austrian exports of goods to the Black Sea region expanded very dynamically. Between 1999 and 2007 they more than tripled. Exports to the three Caucasus countries were increased particularly strongly (+45.7 percent p.a.), albeit from a very low level. Exports to Turkey (2009: € 761 million) and the Ukraine (2009: € 530 million), above all, have a high weight. In 2009, they accounted for 89 percent of exports of goods to the Black Sea region.

### Growing integration of foreign trade in goods



After goods exports had grown unusually fast during the years before the crisis, their decline because of the crisis was also larger than average (except for Azerbaijan and Georgia). Since 2006, Austria's trade balance with the region has constantly been positive, although it worsened considerably in 2009, the year of the crisis.

According to the preliminary data, exports to the region during the period from January to November 2010 had already returned to their pre-crisis level (January to November 2007). Only exports to Armenia shrank according to the preliminary data. In addition to those to Azerbaijan, deliveries to the two largest countries at the Black Sea, Turkey and the Ukraine, could be increased significantly. After the short decline in the wake of the global economic crisis it seems that the Austrian companies are using the opportunities and the potential of the Black Sea region again, so that the strong increase is likely to persist<sup>2</sup>.

By international comparison, too, Austrian exports to the Black Sea region showed a favourable development in the years before the crisis. Among the benchmark countries only Germany's exports to the region expanded more dynamically in 1999-2007 (Germany: +16.2 percent p.a., Austria: +15.4 percent p.a.; Table 5). Like Austria's exports to the Black Sea region those of most of the other trade partners were hit over-proportionately by the economic crisis. The share of the region in total exports declined, Sweden and the USA being exceptions. Averaged over the last ten years (1999-2009) Austrian nominal exports grew exceptionally fast despite the decline during the economic crisis. As in Denmark<sup>3</sup>, nominal exports increased 2.4-fold. Among the countries analysed only Germany exhibited an even higher growth.

**High growth, but further increase possible**

*Table 5: International comparison of the importance of goods exports to the Black Sea region*

	1999	2009	Ø 1999-2007	Ø 2007-2009	Ø 1999-2009	1999	2007	2009
	Million €		Annual percentage changes			Percentage shares in total exports		
Austria	604	1,449	+ 15.4	- 12.7	+ 9.2	1.0	1.7	1.5
Germany	6,654	16,122	+ 16.2	- 14.6	+ 9.3	1.3	2.3	2.0
Italy	3,215	7,301	+ 14.7	- 13.0	+ 8.5	1.5	2.6	2.5
Finland	518	872	+ 12.2	- 18.2	+ 5.4	1.3	2.0	1.9
Denmark	214	515	+ 14.0	- 8.3	+ 9.2	0.5	0.8	0.8
Sweden	1,048	1,555	+ 5.7	- 2.6	+ 4.0	1.5	1.3	1.6
Switzerland	720	1,560	+ 13.8	- 12.4	+ 8.0	1.0	1.6	1.3
USA	3,379	6,238	+ 8.1	- 0.5	+ 6.3	0.5	0.7	0.8

Source: Statistics Austria, UN.

*Table 6: Structural match index of the Austrian goods exports and the demand of the Black Sea region*

	Ø 1997-98	Ø 2007-08	Changes from 2007-08 compared to 1997-98
Armenia	70.5	47.6	- 22.9
Azerbaijan	55.0	46.1	- 8.9
Georgia	53.7	42.3	- 11.4
Moldova	52.4	40.7	- 11.6
Turkey	41.8	35.1	- 6.7
Ukraine	42.2	32.6	- 9.6

Source: UN. A negative sign implies an improvement.

At 1.7 percent the share of the Black Sea region in Austria's total goods exports of the year before the economic crisis (2007) was higher than in the USA, Denmark,

<sup>2</sup> The final report of the "Integrated Regional Programme for the Black Sea Region" quotes the medium-term doubling of the share in Austria's total exports as the objective for tapping the region's economic potential.

<sup>3</sup> However, the importance of the Black Sea region is still far smaller in Denmark than in Austria.

Sweden or Switzerland. The region played a more important part – both before and after the economic crisis – in the exports of Finland, similarly as in those of Germany and Italy.

As an indicator of the short-term export potential<sup>4</sup> a structural match index can be used (Wolfmayr – Stankovsky, 2003). The latter compares the demand structure of the target market to the Austrian export structure. The structural match indices<sup>5</sup> calculated by Aiginger *et al.* (2010) for goods exports to the Black Sea region can be found in Table 6.

The structure of the Austrian exports of goods in 2007-08 showed the closest match with that of the Ukraine's imports of goods, followed by that of Turkey, which had exhibited the best structural match index in 1997-98. For all six countries of the Black Sea region the match between the supply and demand structures increased between 1997-98 and 2007-08. In an international comparison with seven selected competitor countries (Germany, Denmark, Finland, Italy, Sweden, Switzerland, USA) the structural match was relatively close for Austria's export industry (Aiginger *et al.*, 2010). Only Germany showed a better result, reaching the closest structural match with four of the six Black Sea countries. In Turkey and Azerbaijan, Austria ranked first (Aiginger *et al.*, 2010).

The success of the past provides another clue for the future potential of foreign economic relations with the Black Sea region. The competitiveness of Austrian exporting companies in this region can be measured in terms of market share. The Austrian market share in the exports of the OECD 24 to the Black Sea region amounted to 2.3 percent in 2009 (2007: 2.5 percent) thus exceeding the average share of Austria in global exports of the OECD 24 (2009: 2 percent). This market share was particularly high in Ukraine (2009: 4.9 percent), Moldova (4.1 percent) and Armenia (9.3 percent). However, the latter might be distorted by a one-off effect<sup>6</sup>.

Figure 4 compares Austria's market position to that of typical competing countries. Relative to Austria's global market share<sup>7</sup> in the exports of the OECD 24, its market position in the Caucasus and in the Ukraine was excellent in 2009. In the Ukraine, only Finland scored a higher standardised market share. In the Caucasus Austria held the strongest position of all comparable countries, but this result was influenced considerably by the high market share in Armenia. In Georgia, Austria's standardised market share was the highest, in Moldova it was the second highest behind that of Italy. In Turkey, Austria's market share was below-average compared to the positions of comparable countries.

**Export opportunities  
owing to good  
structural match**

**Good competitiveness  
position in Ukraine,  
catching-up potential  
in Turkey**

<sup>4</sup> Apart from short-term export opportunities, which result from an increased regional diversification towards rapidly growing markets, economic policy should not neglect long-term competitiveness and consequently the structural change of the Austrian export industry towards high-quality exports.

<sup>5</sup> Based on Wolfmayr – Stankovsky (2003) this index measures the angle between the vector of Austrian exports and the import vector of the respective trade partner in the Black Sea region. For its calculation the following formula was applied to disaggregated export and import data (three-digit SITC level) of industrial products:

$$c_{ik} = \arccos \frac{\sum_{j=1}^n x_{ji} m_{jk}}{\sqrt{\sum_{j=1}^n x_{ji}^2} \sqrt{\sum_{j=1}^n m_{jk}^2}},$$

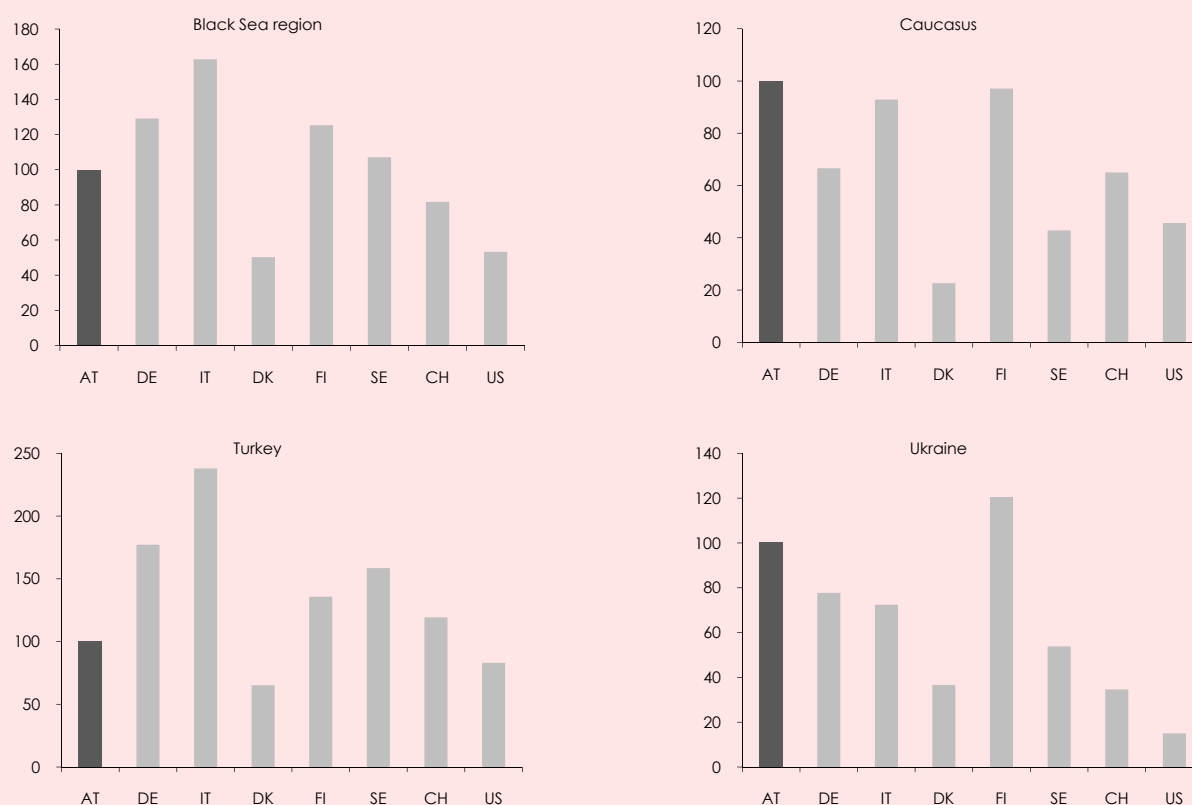
$x$  . . . share in exports of industrial products,  $m$  . . . share in imports of industrial products,  $i$  . . . exporting country (e.g., Austria),  $k$  . . . importing country (e.g., Azerbaijan),  $j$  . . . product group.

The lower the structural match index, the closer the match of the export and import structures of the countries analysed.

<sup>6</sup> During the last four years a substantial share of the Austrian goods exports were classified as "gold exports".

<sup>7</sup> Standardised market shares have been adjusted for the effect of country size/economic weight. At 4.9 percent Austria's market share in exports of the OECD 24 to the Ukraine was almost 2.5 times as high as its market share in global exports of the OECD 24 (2 percent). For Germany this relation is only 1 : 1.9 (market share in the Ukraine: 33 percent, global market share: 17.3 percent). Therefore Germany scored a lower standardised market share (78) than Austria (100).

Figure 4: Standardised market shares in exports of the OECD 24  
2009



Source: WIFO calculations. Doubly standardised market share:  $\frac{Ma_{ij}}{Ma_{aj}} \bigg/ \frac{Ma_{iw}}{Ma_{aw}}$ ,  $Ma \dots$  Market share,  $i \dots$  exporting country,  $j \dots$  importing country,  $w \dots$  world,  $a \dots$  Austria.

During the period 1999-2007 the Austrian services exports to the Black Sea region expanded by 9.8 percent per year starting from a very low level. Even in the crisis years of 2008 and 2009 an – albeit small – increase was achieved on average. Thus services exports to the Black Sea region showed a more favourable trend than total services exports. In 2009, they amounted to € 570 million. Preliminary estimates for the first half of 2010 also show a growth rate (15.6 percent) which is clearly above the average. Overall slightly more than 1.4 percent of all Austrian services exports were destined for the Black Sea countries. As in goods trade the main markets are Turkey and the Ukraine. In 2009, a small trade surplus with the Black Sea region was achieved for the first time since 1998. The services balance with Turkey was negative, above all because of the deficits of "tourism and travel" and "transport". However, a surplus resulted for trade in higher-value services such as "financial services" and "other business services" (Aiginger et al., 2010).

In addition to foreign trade in goods and services, direct investment, too, is a measure of the link between economies. Whereas already in 1999 the nearby countries in Central and Eastern Europe accounted for a substantial share of Austria's accumulated direct investments, the stock of direct investments in the six Black Sea countries<sup>8</sup> was still negligibly small. In 1999 it amounted to only € 36 million or less than 0.2 percent of the total stock of Austrian foreign direct investments. Since then Austrian companies have substantially extended their direct investment activities in the

**Positive services balance for the first time in 2009**

**Marked increase of direct investment stocks**

<sup>8</sup> In the EU countries Romania and Bulgaria Austria has been the leading investor for years. As mentioned above these countries are not included in the analysis.

Black Sea region. In the years before the economic crisis (1999-2007) the value of the direct investment stock increased by 90 percent p.a., albeit from a low level. At € 6.3 billion it is assumed to have reached a peak in 2007. This amount corresponded to 6.3 percent of all Austrian foreign direct investments.

Table 7: Austria's services trade with the Black Sea region

	1999	2009 Million €	2010 <sup>1</sup>	Exports		Ø 1999-2007 Annual percentage changes	Ø 2007-2009 Annual percentage changes	2010 <sup>1</sup>	Balance 2009 Million €
				1999 Percentage shares	2009				
Black Sea region	266	570	282	1.21	1.45	+ 9.8	+ 0.5	+ 15.6	4
Turkey	169	256	147	0.77	0.65	+ 6.5	- 4.4	+ 16.7	- 103
Ukraine	89	250	107	0.41	0.64	+ 12.0	+ 6.6	+ 21.6	76
Other countries	8	64	28	0.04	0.16	+ 29.7	± 0.0	- 6.7	31
World	21,959	39,356	20,394	100.00	100.00	+ 7.7	- 0.4	+ 3.2	12,850

Source: OeNB, Statistics Austria. Other countries: Armenia, Azerbaijan, Georgia, Moldova. – <sup>1</sup> First half year.

According to preliminary estimates the stock amounted to € 4.4 billion in 2009 and was thus lower than before the crisis. The transactions of the first half of 2010 did not yet show any acceleration of activity. During the crisis, however, direct investment stocks showed heterogeneous trends: whereas they declined noticeably in the Ukraine, they continued to expand in the other countries. The developments in the Ukraine can probably be attributed to valuation losses, because the number of investments as well as the number of employees weighted with the share in the nominal equity of subsidiaries continued to rise in 2008. Especially weighted employment in subsidiaries was expanded substantially between 2007 and 2008 (to 41,959)<sup>9</sup>.

Table 8: Austria's direct investments in the Black Sea region

	1999	2007	2009 <sup>1</sup>	Stocks		1999	2007	2009	Flows	
				Ø 1999-2007	Ø 2007-2009				2009	2010 <sup>2</sup>
	Total value in million €			Annual percentage changes		Percentage shares			Million €	
Black Sea region	36	6,331	4,400	+ 90.9	– 16.6	0.19	6.26	3.89	807	313
Ukraine	23	3,699	1,500	+ 89.0	– 36.3	0.12	3.66	1.33	172	127
Other countries	13	2,632	2,900	+ 93.8	+ 5.0	0.07	2.60	2.57	635	185
World	19,039	101,087	113,000	+ 23.2	+ 5.7	100.00	100.00	100.00	4,655	4,623

Source: OeNB. Other countries: Armenia, Azerbaijan, Georgia, Moldova, Turkey. – <sup>1</sup> Preliminary data from a projection based on transactions. – <sup>2</sup> First half year.

Despite the dynamic trend to date there is further potential for market development in the Black Sea region<sup>10</sup>. The region offers opportunities beyond its role as a market: favourable local production conditions can be used for an international division of labour to secure and improve the competitiveness of domestic companies.

The economic crisis caused a fall in economic activity in all countries of the Black Sea region (Armenia, Azerbaijan, Georgia, Moldova, Ukraine and Turkey). By now all economies are in an upswing and (except for Armenia and the Ukraine) have returned to the pre-crisis level. There are no reliable forecasts for future developments. However, similarly high increases as before the outbreak of the crisis can be expected in the medium term. Owing to this dynamic trend the region continues to

## Summary and conclusions

<sup>9</sup> In the Ukraine the financial sector accounted for a large share of the direct investments and the increase of employment (Aiginger et al., 2010).

<sup>10</sup> The final report of the "Integrated Regional Programme for the Black Sea region" mentions a medium-term doubling of the active Austrian direct investments in the region as one objective.

offer a large demand potential for Austrian exporters, Turkey being by far the most important market due to its size.

In the years before the crisis the region continuously gained importance for the Austrian economy. In 2010, too, foreign trade in goods is assumed to have grown again after declining in 2007-2009 due to the crisis. Nevertheless, an international comparison with typical competing countries shows a potential for further gains in market share. For example, the relatively close match of the Austrian export structure with the import structure of the Black Sea countries points to a short-term export potential, which is relatively high by international standards. The match is particularly close in foreign trade with the Ukraine and Turkey, countries with a large population and considerable market potential. In terms of market share the competitiveness of Austrian exports of goods to the region is high in the Ukraine as well as in Georgia and Moldova, but only moderate in Turkey.

The "Internationalisation Drive" of the federal government includes measures to support Austrian companies in their internationalisation efforts in the Black Sea region: in addition to the "Integrated Regional Programme for the Black Sea Region", the Economic Chamber of Austria offers, i.a., information events as part of its programme "go international" (e.g., the AWO Forum "Schwarzmeerregion: Ihr Zukunftsmarkt vor der Tür" – "The Black Sea Region: Your Future Market around the Corner"). In view of the multifarious conflicts burdening the region's economies, foreign policy besides economic policy can make a positive contribution.

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## References

### *The Black Sea Region. Economic Trends and Role for Austria's External Sector – Summary*

The countries of the Black Sea region, located at the strategic crossroads of Europe, Central Asia and the Middle East, are rapidly gaining importance, in view of their geographic proximity, rich mineral resources as well as their market potential and labour pool. The article looks into the region's macroeconomic development and Austria's foreign trade relations with its countries. The region's dynamic economic growth creates a major demand potential for the future. Turkey, in particular, is an enormous market because of its sheer size. Austria enjoys good trade relations with the region, which can nevertheless be extended considerably. In the Ukraine, Austrian companies are well-positioned, and Austria's export structure closely matches that of imports both in the Ukraine and in Turkey.