Chapter 6
Russia’s post-Soviet gas industry during the 1990s

6.1 Introduction
After the collapse of the Soviet Union, the international system was no longer determined by a bipolar international system of the US and Soviet Union. The US were the only hegemony remaining, and for a while a unipolar international system existed. Moscow’s sphere of influence was curtailed to a degree, and Soviet institutes such as the CMEA, the Warsaw Pact and the Soviet Union disappeared [Trenin 2007]. Only the CIS could be regarded as a new organisation for retaining Russian influence in the former Soviet states [Zhiznin 2007; Amineh 2003].

Following the collapse of the Soviet Union, moreover, market concepts based on the Western model were introduced in Russia, which led to major reforms, including in the energy sector. The Russian economy collapsed during the transitional period (the Russian Gross Domestic Product, GDP, dropped by 44 percent between 1989 and 1998), which caused the demand for gas to drop by 16 percent in during the period from 1990 to 1997. Exports to the CIS also dropped by 31 percent. Since gas production only dropped by 8 percent, the resulting surplus had to find its way to Europe [Victor and Victor 2006].

The disintegration of the Soviet Union also led to the gas value chain breaking up, causing Russia to lose control over parts of the value chain outside Russia. The new transit regime that arose in Ukraine increased the risks attached to supplies of gas to Europe, among other things, as at the time 90 percent of the supplies of gas to Europe passed through Ukraine. Moreover, Moscow lost control over the gas fields in Central Asia, the Caucasus and Ukraine, some of which developed their own export strategies [Stern 2005; Victor and Victor 2006].

The purpose of this chapter is to explain the reorganisation of the post-Soviet gas sector in a macro-economic context and the changing positions (and export positions in particular)

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136 For a detailed analysis of the political and geopolitical position of Russia (and of the West) in the international system following the disintegration of the Soviet Union, see also Chapter 3 in Boon von Ochussé (2010).
137 The agreement that led to the formation of the CIS was signed in December 1991. That agreement is sometimes called the Belavezha Accords. The CIS is made up of ten former Soviet republics, viz. (2010) Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Moldova, Ukraine, Uzbekistan, Russia, Tajikistan and Belarus. Turkmenistan left the Commonwealth as a member state in 2005, since when it has been an associate member. Georgia joined the CIS in 1993, but left again in August 2008, as a result of its conflict with Russia. The Baltic States (Estonia, Latvia and Lithuania) are not part of the CIS, and joined the EU in May 2004.
138 The dissolution of the CMEA also resulted in new, independent states, each of which had its own transit regime (see Chapter 7).
of the former Soviet republics and their relationships with Russia. During the 1990s, these changing circumstances impacted Russian export strategies (see also Chapter 7). Section 6.2 discusses the internal Russian gas market and the changing institutionalisation of the oil and gas sectors in more detail. Section 6.3 deals with the struggle for the gas reserves and routes around the vacuum that was created in Central Asia and the Caucasus. The transit dealings with the former Soviet republics in Eastern Europe (Ukraine and Belarus) are addressed in Section 6.3, in which connection possible mitigation strategies for transit risks are also discussed. Section 6.4, finally, presents a conclusion.

6.2 The transition of the internal Russian gas market in the 1990s

As discussed in Chapter 5, Gorbachev launched a series of changes to the Soviet system in the 1980s, with perestroika and glasnost. In his view, those measures would allow the continued existence of the system. However, according to Åslund [2007], the fall of the Soviet system seemed unavoidable despite those changes, owing to three internal economic problems on top of the external difficulties, such as the declining export income (from oil and gas) resulting from the falling prices of oil and gas and the devaluation of the dollar in 1985:

- the change in policy resulted in a higher budget deficit;\(^{140}\)
- the partial opening of the economy, both internally and externally, gave private parties more freedom, which led to value being withdrawn from public enterprises and possibilities for arbitrage being sought out in the price and exchange rate differences between the Soviet Union and the West;\(^{141}\)
- the system’s increasing degree of openness led to a partial national and democratic empowerment, which in turn led a number of republics and regions to detach themselves from the central authority and, for example, no longer relinquish their income to Moscow.

Eventually, the CMEA countries were the first to detach themselves from the Soviet Union (with Gorbachev’s consent, it should be noted), followed by the other Soviet republics. As such, Gorbachev’s reforms ultimately led to the fall of a major power (through the collapse of the Soviet Union and the CMEA), an economic system (centrally-planned economy) and a political system (communism) [Åslund 2007].\(^{142}\)

\(^{139}\) Other energy sectors, such as the nuclear and coal sectors, are not discussed. Those sectors also underwent a process of privatisation. See for example Zhizhin [2007].

\(^{140}\) Because, among other factors, the authorities could not exercise sufficient control over the expense patterns and the budget deficits were financed by printing and borrowing additional money.

\(^{141}\) The arbitrage was effected using the regulated commodities exports, subsidised grain imports, subsidised credit and state subsidies.

\(^{142}\) For a geographic presentation of the changes, see Map 8.1 in Chapter 8.
6.2.1 Transition of the Russian gas sector in a macro-economic context

After the peaceful dissolution of the Soviet Union in December 1991, Boris Yeltsin became President of Russia, because he understood that the Soviet Union was no longer politically tenable [Åslund 2007]. In the process of defining new Russian policy, the emphasis was placed on economic reforms and on reorganising the Soviet states by means of the CIS. Western values were adopted for foreign policy, though conflicts and lack of communication between the various ministries meant that a uniform foreign policy was lacking during the Yeltsin years [Brezezinski 1997; Cummings 2001].

Starting in January 1992 'shock therapy', as it is called, was used to propose radical market reforms based on neoliberal concepts, led mostly by Yegor Gaidar and Anatoly Chubais. Although several of the objectives of the shock therapy were achieved in milder forms, such as privatisation, price regulation and the opening of the market, radical reforms failed to appear and were slowed down by the strong industrial lobby. This allowed Russian managers of state enterprises to continue to withdraw value from the system. By 1992, this rent-seeking behaviour even accounted for 80-90 percent of the Russian GDP [Åslund 2007]. The gradual reforms, shortcomings in the way inflation was handled and the rent-seeking behaviour were some of the causes of the hyperinflation and the monetary crisis in 1993 [Åslund 2007; Dabrowski 1995].

The energy sector was also restructured during Russia’s transitional process at the beginning of the 1990s. The first official energy policy was defined in 1992, as part of the shock therapy, stating among other things that the efficiency of the energy industry was to be increased and the first phase of privatising the energy sectors was to start [Fredholm 2005]. Although Moscow hoped to form a single integrated national oil company, the industry was eventually broken up owing to the strong industrial lobby (similar to the other sectors). Besides a national oil company (Rosneft), other vertically integrated oil companies came about, such as Lukoil, Yukos and Surgutneftegaz. Those companies expanded their Russian portfolios further by means of acquisitions [Janssen 2004; Goldman 2008].

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143 Other objectives that were partially achieved were (1) uniform exchange rates; (2) the reduction of the military arsenal by 85 percent; and (3) legal status for small private enterprises, which is one of the defining conditions for a ‘normal’ market economy based on private ownership (although in practice the definition of private ownership in Russia was applied differently, owing to the absence of legislation [Åslund 2007]).

144 Russia introduced the principal measures of the 'Concept for Energy Policy under New Economic Conditions', covering the period until 2010. The energy policy was defined for the purpose of offering Russia a reliable supply of energy, guaranteeing the independence of that supply and promoting potential exports of energy [Fredholm 2005].

145 During the Soviet era, the responsibility for the oil sector was shared by various ministries. In 1987, regional administrators were given greater powers, through state enterprises. In September 1991, the Russian Ministry of Fuel and Energy was transformed into the public limited liability company Rosneftegaz (Russian gas and oil) [IEA 1995].
As discussed in Chapter 5, in 1989 the responsibility for the Soviet gas industry was placed with Gazprom, as a state enterprise. After the disintegration of the Soviet Union, three key views of how to institutionalise the gas industry appeared [Stern 1999]:

- Gazprom’s management wanted an integrated public limited liability company over all the former Soviet states;
- the individual republics favoured independent entities (i.e., fragmentation); and
- the economic reformers within the government advocated breaking up the gas industry, based on the oil sector’s example.

Eventually, the assets were divided between Belarus (1.5 percent), Ukraine (9.5 percent) and Russia (89 percent), with the government retaining full ownership [Victor and Victor 2006]. The nature of the industry, where control over the value chain yields benefits, and the strong political lobby of the management prevented the gas industry from being broken up [Åslund 2007; Stern 1999]. Within the Kremlin, the lobby for Gazprom was reinforced by Chernomyrdin’s appointment as Deputy Prime Minister for Energy in May 1992 (he was later appointed Prime Minister). His protégé, Rem Ivanovich Viakhirev, succeeded Chernomyrdin at Gazprom [Goldman 2008; Panjoeskin and Zygar 2008]. In November 1992, Gazprom was transformed into a Russian joint-stock company (RAO) [Gazprom 2008a].

Following the economic crisis, in 1993 Yeltsin wished to further reform the economy, but encountered stubborn resistance from the State Duma, which resulted in the threat of a coup. In the autumn of 1993, after military involvement, Yeltsin succeeded in acquiring more power, by means of a new constitution, and replaced a number of radical reformers with professional industrialists such as Chernomyrdin and Soskovets, in order to start a process of stabilisation [Åslund 2007]. As early as in August 1992, reformer Chubais had reached a compromise with the managers of state enterprises for continuing the privatisation. With the system of ‘voucher privatisation’, as it was known, the managers relinquished a large part of their quasi-ownership in exchange for legal guarantees of a smaller part of the ownership. The secondary trade in vouchers was stimulated at a later point by the fact that many Russians failed to seal the vouchers [Åslund 2007]. In the autumn of 1994, the position of the managers of state enterprises was weakened by the drop in the values of commodity exports owing to the fall of the rouble (27 percent) and the continued inflation. Chubais unsuccessfully tried to push through reforms, using credit assistance from the IMF (approximately 2 percent of the Russian GDP) and other measures such as reducing the budget deficit and liberalising large numbers of prices [Åslund 2007].

Although the gas contracts with Western gas companies initially remained under government control in 1990, through Soyuzgazexport, they were subsequently returned to Gazprom. In response to the state’s retention of the export market, Gazprom temporarily created its own export division and strategy, with Zarubeshgaz [Victor and Victor 2006].

As a proportion of the GDP the rents dropped from 80-90 percent in 1992 to 10 percent in 1995 and 15 percent in 1998 [Åslund 2007].
The voucher privatisation of the oil sector in 1992 meant that it was primarily the managers of state enterprises and government bodies that acquired the shares. Foreign parties were not permitted to own more than 15 percent of the shares. The privatisation gave rise to new enterprises; for example, Sidanko, Onako, Slavneft and VNK were formed in 1994, causing Rosneft’s share in the production to drop to 4 percent [Goldman 2008; Janssen 2004]. Like the managers in the oil sector and elsewhere, Gazprom’s management auctioned vouchers in order to privatise part of Gazprom (in 1993-94). In 1994, over 30 percent of the shares were held by private parties, while 15 percent of the shares had been sold directly to Gazprom employees (mainly managers) and the remainder was government-owned (40 percent) or held by Gazprom (10 percent) [Stern 1999; Goldman 2008].

At the start of Russia’s transitional period (1989-1995), Gazprom’s management did not succeed in retaining full control over the Russian value chain. Management of important gas facilities fell to other Russian companies. Foreign companies such as Royal Dutch Shell, ExxonMobil and BP also gained entry to Russian gas reserves, by way of PSAs (mostly associated gas) [Goldman 2008; Victor and Victor 2006]. Gazprom was granted an exemption from export taxes, some import tariffs and VAT, in exchange for a number of privileges relating to gas exports, among other things, and some obligations, such as an agreement to continue the generally loss-generating supplies to Russia and other CIS states [Åslund 2005]. In addition, midway through the 1990s Gazprom’s management was attracted by profitable trade through intermediaries, primarily between Turkmenistan and Ukraine (see sections 6.3 and 6.4) [Goldman 2008].

As a result of the new reforms in 1994, young entrepreneurs and bankers – more widely known as oligarchs – succeeded in generating more economic and political influence. The lack of financial resources led to further privatisation being initiated in 1995, using the loans-for-share programme, with oligarchs in particular acquiring control over the large enterprises in exchange for loans. They also helped Yeltsin win a second term in office, in exchange for political and economic support after his re-election [Åslund 2007; Hoffman 2002].

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144 Part of the shares in Gazprom were intended for sale abroad. To prevent the control over Gazprom from being lost to foreign parties, shares were only sold abroad with management approval [Goldman 2008].

145 However, Gazprom’s monopoly on gas transport meant that the efforts of other oil companies to market their associated gas were generally opposed. As a result, the gas that was released during the production oil (approximately 20 bcm/y) was flared [Victor and Victor 2006].

146 In 1993, the value of Gazprom’s tax exemptions equalled 1-2 percent of the Russian GDP [Åslund 2007].

147 Many of the oligarchs had become rich trading Western goods in the Soviet Union, during the reforms under Gorbachev. The oligarchs used the bank positions they had acquired to build up their capital, by such means as providing capital to the government in exchange for government bonds carrying high interest rates. Their positions in the industry were reinforced by the voucher privatisation in 1992 [Åslund 2007; Hoffman 2002]. For a detailed (journalistic) discussion of the oligarchs’ backgrounds, see for example Hoffman [2002] and Freeland [2000].
Moreover, the loans-for-share programme launched the privatisation of the oil sector, allowing the oligarchs and Western energy companies – albeit to a minor extent because of the partial exclusion of foreign operators – to acquire oil interests [Zhizhin 2007; Fredholm 2005]. However, an unfavourable economic climate for banks and the lack of proper competition (for example because of restrictions on the auction) meant that the auction of parts of the oil sector generated less than the government had expected [Janssen 2004].

Despite a number of proposals to deregulate the gas industry, Gazprom was excluded from the loans-for-share programme, largely because of the political lobby [Victor and Victor 2006; Åslund 2007]. Yet Itera’s position as an intermediary became stronger and stronger, and as the 1990s progressed it became the second largest producer of gas after Gazprom, thanks in part to its close political and other ties with Viakhirev and Ukrainian politicians. This allowed Itera and several politicians to withdraw billions of dollars from Gazprom’s profits [Goldman 2008; Panjoesjkin and Zygar 2008].

After Yeltsin’s new term in office had been achieved, the reformers called for new reforms in order to stimulate a ‘normal’ market economy. However, that process was opposed by the oligarchs. The conflicts between the various sides helped bring about the financial crash of August 1998 [Åslund 2007]. In addition, Russia’s fiscal and monetary policies were weak, owing among other factors to tax evasion, substantial expenditure to artificially maintain a high exchange rate for the rouble and the first war in Chechnya [Åslund 2007]. Moreover, as a result of the financial crisis in Asia in 1997 and 1998, which caused the demand and prices for energy to drop, Russian export income from gas and oil fell, and the growing budget deficit could no longer be financed. The financial crash in 1998, coupled with the subsequent devaluation of the rouble, also caused problems for the Russian government with its interest payments and repayments of government bonds. This caused instability in the banking system, and created difficulties for the oligarchs [Åslund 2007; Goldman 2008].

The effects of the financial crisis and the low oil prices had a downward impact on the profitability of the oil sector, which meant that the export markets could no longer com-

[152] The privatisation was also part of the first official post-Soviet energy strategy under Yeltsin, based on the document ‘On the Main Directions of Energy Policy and restructuring of Fuel and Energy Industry of the Russian Federation for the Period up to the Year 2010’. The decree from 1995 provides for ongoing privatisation in the upstream oil sector. However, state influence in the midstream was increased: the transport elements remained under the supervision of the Russian state [Cors 1997].

[153] For example, Gazprom sold gas to Itera for $4 per mcm, which was then sold in Ukraine for $80 per mcm (while the actual price in Ukraine was around $42 per mcm) [Goldman 2008].

[154] A number of primarily young oligarchs managed to profit from the financial crisis, however, by acquiring interests in commodity-producing companies, which had dropped far below their market values. Yukos, for example, increased its asset portfolio in this manner [Goldman 2008; Åslund 2007].
penetrate the losses on the Russian market. Borrowings of foreign capital increased the Western influence [Åslund 2007; Janssen 2004]. At the same time, a process of consolidation took place following the privatisation process, and profitable divisions were demerged and transferred abroad. The consolidation made the oil sector more attractive to investors and made it possible to reduce tax liabilities [Janssen 2004; Goldman 2008].

The gas market’s management lost some of its political protection when Chernomyrdin was no longer Prime Minister in 1998 [Panjoesjkin and Zygar 2008]. Gazprom’s management then proposed large-scale asset stripping, which led to parts of Gazprom’s assets being transferred to Itera and other companies that had close ties with Gazprom’s management [Åslund 2007]. In addition, prices in the industrial sector were liberalised and Gazprom’s tax evasion was addressed by tackling barter agreements and increasing tax rates [Stern 2005; Åslund 2007]. Until 1997, state ownership remained at 40 percent. In June 1998, Gazprom became a Russian open joint-stock company (Otkrytoe Aktsionernoe Obschestvo – OAO), and in the same year Ruhrgas of Germany acquired a 2.5 percent interest in Gazprom, which was later increased [Stern 1999; Gazprom 2008a].

As a consequence of the financial crisis, a number of fiscal and regulatory reforms were implemented quite quickly, although major reforms were not implemented until Putin became Prime Minister in 1999 and shortly afterwards President (see also Chapter 10). In the same year, the effective policy of OPEC, combined with the recovery of the global economy, caused oil prices to start rising again in March 1999. The premise of the higher oil prices allowed Putin to increase his control over strategic sectors such as the energy sector. The higher oil prices also generated more export income and improved self-awareness [Åslund 2007; Goldman 2008]. Although Putin was still working with the Yeltsin ‘family’ during his first period in office, he soon put forward former Komitet Gossoedarstvennoj Bezopasnosti (KGB) members and technocrats from his period in St. Petersburg [Goldman 2008]. For the gas sector, Putin started to become actively involved in implementing reforms in Gazprom’s management, in response to the corruption

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155 In 1998, access rights to the Russian pipeline network were also given to third parties. Approximately 20 shippers made use of that possibility in 2000, and represented almost 17 percent of the total transit in the UGTS [Stern 2005].

156 Russian organisations held 35.3 percent of the shares in Gazprom in 1997, Russian individuals held 21.85 percent and the remainder was held by foreign investors (1.98 percent) and the Russian Federal Property Fund (0.87 percent). In 1996, 1 percent of the shares in Gazprom were made available to foreign investors, in the form of London Depository Receipts (LDRs) [Stern 1999].

157 In economic terms (1) market reforms were encouraged; (2) monetary policy was improved, in part through the influence of the IMF and the World Bank, causing the devaluation of the rouble; (3) legal and fiscal reforms were implemented; (4) deregulation was carried through to encourage small businesses; and (5) the possibility of joining the World Trade Organisation (WTO) was considered [Åslund 2007].

158 A distinction is made between initiates coming from the KGB (the Soviet Union’s principal security and information service, known as siloviki) and technocrats from St. Petersburg: mostly young liberal economists and legal experts from St. Petersburg (such as Medvedev and Miller), who advocated private ownership and a free market economy. See also Goldman [2008; pp. 192-194].
there. In 2001, for example, Putin had Viakhirev replaced by Dmitry Medvedev and Alexey Miller [Goldman 2008]. As a result of the financial crisis in 1998, foreign investors managed to increase their share in Gazprom to 10.31 percent in 2000. The Russian government also owned 38.37 percent of the shares [Stern 1999].

6.2.2 Russia’s transition process: constraints and opportunities for Gazprom’s strategy

The macro-economic developments in Russia and the institutional choices within the Russian gas sector imposed restrictions on and created opportunities for the strategy adopted by Gazprom in the 1990s. Owing in part to those institutional choices, Gazprom acquired control over approximately 70 percent of the gas fields during the 1990s, and it became largely responsible for Russia’s gas production, alongside a number of oil companies that also produced gas and independent or quasi-independent gas producers (see Chapter 10) [Zhiznin 2007].

Following the disintegration of the Soviet Union, Gazprom lost a third of its pipeline capacity and a quarter of the original Soviet compression capacity. Over the years, Gazprom attempted to regain and retain control over the network [Victor and Victor 2006].

The decline in gas production was relatively minor after the Soviet Union collapsed: from 600 bcm in 1991 to 561 bcm in 1996 (6.5 percent) [BP 2008]. The demand for gas in Russia, conversely, dropped by 11.8 percent, from 431 bcm in 1991 to 380 bcm in 1996, while exports to the other Soviet states fell by 31 percent (from 110 bcm in 1990 to 76 bcm in 1998), one of the causes being the economic instability and the rising regulated gas prices [Stern 2005; BP 2008].

The increasing difference between Russian production and consumption needed to make its way to other profitable growth markets, and Northwestern and Southwestern Europe in particular (see Chapter 7) [Victor and Victor 2006]. The surplus that had been created removed the need for large-scale investments in new fields, on the Yamal peninsula and in the Shtokman gas field for example. Moreover, the exports to the Western market matched the objective of increasing the profitability of the gas industry [Victor and Victor 2006].

It proved impossible to increase the profitability of the internal gas sector. It was politically inadvisable to raise Russian gas prices substantially and rapidly, and moreover not in Gazprom’s interests, as a profitable domestic market would result in cries to break up and

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159 The Russian Federation is represented by the Federal Agency for Federal Property Management (38.4 percent), state enterprise OAO Rosgazifikatiya (0.9 percent) and OAO Rosneftegas (10.7 percent). Russian organisations held 33.6 percent of the shares and Russian individuals held 17.7 percent [Stern 1999].

160 In the 1990s, non-Gazprom gas production was approximately 35-40 bcm/y [Stern 1999].

161 Conversely, the imports from Central Asia, and particular Turkmenistan, dropped sharply (see also Section 6.3). The electricity sector is responsible for a large part of the demand for gas in Russia (some 40 percent). Households represent around 20 percent of the Russian demand [Stern 2005].
reallocating Gazprom’s assets.\footnote{135} However, Gazprom had a degree of latitude in the former Soviet states (see Section 6.4) [Victor and Victor 2006]. Political opposition to tackling payment defaulters prevented Gazprom from taking real measures.\footnote{162} However, from 1999 onward, concrete measures were implemented to deal with the defaulters [Stern 2005].

During the 1990s, Gazprom entered into important strategic alliances with such partners as Ente Nazionale Idrocarburi (ENI), Shell, Ruhrgas, Badische Anilin- und Soda-Fabrik (BASF) and Lukoil of Russia. The Western alliances comprised various elements. Besides their financial resources and credit ratings, Western companies also provided technical support for the projects. They also mostly worked together to develop Gazprom’s oil and gas reserves. Strategic alliances were generally reinforced by asset-swaps along the value chain [Stern 2005; Stern 1999].

6.3 Repositioning of the Caspian gas region
The collapse of the Soviet Union and the end of the Cold War had a substantial impact on the direction and organisation of gas flows from the Caspian region.\footnote{165} Gas transports from the Caspian region during the Soviet era depended entirely on transport to Russia by pipeline. Following the collapse, Russia wished to retain its influence over the gas corridors from the Caspian region [Olcott 1996]. However, because of the lack of demand from Russia and other Soviet republics, the Caspian countries, particularly Turkmenistan, opted for multiple gas transport routes. In addition, the partial opening of the gas market allowed Western companies access to the Caspian gas reserves [Kalyuzhnova et al. 2002]. In the search for new geographic markets and alternative routes, Turkmenistan and other Caspian countries encountered strategic competition between governments within the region and beyond and between national and international oil and gas firms. In this playing field, the various interests of the Western, Russian and other governments clashed.

\footnote{135} As a result, the regulated Russian gas prices remained far below European wholesale gas prices (approximately 20 percent of the European wholesale gas price).

\footnote{162} The economic recession, the higher domestic gas prices, the continued absence of proper government policy and problems in the banking system combined to create payment difficulties. Until the end of the 1990s, the payment ratio was between 40 and 50 percent. However, disconnecting customers on a large scale was socially and politically inadvisable, particularly during winter. In 1996, Gazprom formed Mezhtorggaz in order to centralise sales in Russia, for the purpose of raising the payment ratio [Stern 2005].

\footnote{165} Important business partnerships came about during the 1990s, for example with Gasunie of the Netherlands and with Statoil and Norsk Hydro of Norway. In addition, important business partnerships were built up with contractors, to construct and supply materials. For Western companies, partnership with Gazprom continued to represent risks, such as the lack of certainty about third-party access in Russia [Stern 1999].

\footnote{166} See Chapter 9 for a detailed analysis of the statistics, strategies and pipeline projects in the Caspian region. The oil market is not included in that analysis. For an extensive analysis of the oil market, see for example Aminin [2003]. Kyrgyzstan and Tajikistan are also disregarded, as those countries were not major gas producers or consumers in the 1990s (less than 1 bcm/\text{y}). Uzbekistan was the principal exporter to those countries. Moreover, Kyrgyzstan and Tajikistan did not play an important role in terms of gas transit (only small intra trade and possible to China) [Stern 2005].
Transit risks, political issues and conflicts also influenced the possible strategies [Amineh 2003].

In this study, the emphasis is on the countries that played an important role in the gas sector. In terms of production, Turkmenistan, Kazakhstan, Azerbaijan and Uzbekistan have notable oil and gas reserves, with Turkmenistan possessing by far the greatest export potential. In addition to these countries, Georgia also plays an important role in terms of transit.

6.3.1 Developments in the Caspian gas market
During the time of the Soviet Union, the Soviet republics in the Caspian region had only a limited degree of autonomy. Following the collapse of the Soviet Union in 1991, the new independent states were forced to redefine their internal political legitimacy, which was mostly obtained by the autocratic former members of the Communist Party [Katz 1997; Kalyuzhnova et al. 2002]. During the process of transition, new alliances were formed within the region and across the international spectrum. Although Russia’s absolute hegemony over the Caspian region disappeared, Russia continued to play a dominant role in the new political alliances, for example through the CIS [Olcott 1996]. With the exception of Turkmenistan, which retained its independent status, the countries in Central Asia focused primarily on cooperation with Russia.

The countries in the Caucasus, Ukraine and Moldova, conversely, also formed regional organisations without Russian involvement. An example of such an organisation is the Georgia, Ukraine, Azerbaijan, and Moldova Organisation for Democracy and Economic Development (GUAM), that looked to European and Atlantic security structures such as the North Atlantic Treaty Organisation (NATO) for partnerships [Amineh 2003]. On the side of the West, the US was interested chiefly in the Caspian region. The involvement on the part of the Europeans was less than expected, except for a few initiatives such as Interstate Oil and Gas Transport to Europe (INOGATE) and the Technical Assistance for the Common Wealth of Independent States (TACIS) programme [Bossuyt 2008]. Besides approaching parties in the West, the Islamic countries around the Caspian region strengthened their ties with the predominantly Islamic region, with such alliances as the Economic Cooperation Organisation (ECO) and the Organisation of Islamic Conference (OIC). Asia played an insignificant role in the Caspian region during the 1990s [Amineh 2003].

Moreover, there was no longer an integrated economic system in which Moscow used the Gosplan to plan the economy, resulting in communal infrastructures for water, roads, railroads and energy. The subsequent transition had major implications for, among other

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166 Other security-focused and economic organisations besides the CIS that focused on cooperation with Russia and in which the Central Asian countries participated included the Shanghai Cooperation Organisation (SCO), known formerly as the Shanghai Five Group, the Collective Security Treaty Organisation (CSTO) and the Central Asian Union (CAU), which was later converted into the Central Asian Cooperation Organisation (CACO) [Lukin 2004; Kalyuzhnova et al. 2002; Amineh 2003].
things, the way in which the flows of gas from the former Soviet states were organised [CIEP 2008]. Owing to the decline in the demand in Russia and other CIS countries, discussed above, gas production from Central Asia became less crucial in the Russian 'gas portfolio'. This development, combined with Russia's internal problems, meant that Moscow and Gazprom devoted less attention to gas from Central Asia during the first half of the 1990s. As a consequence, Central Asia started to look for a different strategy for marketing its gas and oil reserves [Victor and Victor 2006].

The removal of Moscow's absolute hegemony attracted other countries to the Caspian gas and oil reserves, such as the West (the US in particular) and its international energy firms [Forsythe 1996]. The gas supply of the Caspian region could compensate for the decline in the European gas production, and offered the region a way to diversify its gas supplies. However, the political instability and the poorly functioning legal system combined with low oil and gas prices to create an unfavourable investment climate for foreign parties. Of the Caspian countries in that time, Kazakhstan was most open to foreign investments [Amineh 2003; Kalyuzhnova et al. 2002]. The unstable investment climate did not deter the national energy firms of the Caspian and surrounding countries to the same extent [Amineh 2003; Stern 2005].

Turkmenistan headed the list for the Caspian gas reserves and production, followed at some distance by Uzbekistan, Kazakhstan and Azerbaijan. At the end of the 1980s, Turkmenistan was producing over 80 bcm/y. In the 1990s, Turkmen production dropped, to 56.1 bcm to 1992 and to 12.4 bcm in 1998, as a result of the diminishing demand from Russia and the CIS and the difficulties with the gas trade between Turkmenistan and Ukraine, among other things [BP 2008; Stern 2005]. The recovery in demand after 1998 caused the Turkmen production to rise substantially, intended largely for Russia and Ukraine [BP 2008]. Gas production in Kazakhstan also declined in the 1990s, returning to its former levels of 6-7 bcm/y around 1997. Owing to the large domestic consumption volumes, Kazakhstan became a net importing country during the 1990s [Amineh 2003]. The Azeri gas production also dropped substantially: in 1985, during the Soviet era, Azerbaijan produced over 30 bcm, which had dropped to 8 bcm by 1991 and to 5.2 bcm by 1998 [BP 2008]. Contrary to the other countries in Central Asia, Uzbekistan increased its gas production from 39.1 bcm in 1991 to over 50 bcm/y by the end of the 1990s [BP 2008].

Other Russian gas and oil companies, such as Lukoil and Yukos, were interested. In July 2000, Lukoil, Gazprom and Yukos launched a joint venture to develop the Caspian reserves as part of the Eurasia Gas Alliance (EGA) [Amineh 2003; Zizhnin 2007].

Chevron set up the TengizChevroil to explore the Tengiz oil field in Kazakhstan. Western companies were subsequently also granted access to other fields in Kazakhstan, including the Kashagan field. In 1994, the Azerbaijan International Operating Company (AIOC) was formed in Azerbaijan, in which BP and, from the US, ExxonMobil played leading roles [Baghat 2002]. The international energy firms from Europe – such as Total, Royal Dutch Shell, ENI and BP-Aramco – also held ownership interests in the upstream sector of the Caspian region [Amineh 2003].
In addition, Uzbekistan and Kazakhstan were, and still are, the most important transit countries for exports from Turkmenistan [Stern 2005].

6.3.2 Caspian gas export flows: new pipeline routes in the 1990s

Because the Caspian region is surrounded by land mass and possibilities for transporting gas are generally missing, Turkmenistan and the other countries in the Caspian region were limited in their export options [Amineh 2003; Stern 1999]. The existing Soviet pipeline network allowed Russia to retain control over three quarters of the Turkmen export [Stern 1999]. The pipeline network that had been developed during the Soviet era, the Central Asia Center (CAC) pipeline, connects the countries east of the Caspian Sea to the Russian market. The Western Corridor links the Turkmen fields near the Caspian Sea to the Russian UGTS. The Eastern Corridor connects the gas fields in the east of Turkmenistan and the south of Uzbekistan to the Russian gas pipeline network by way of Western Kazakhstan. From the Russian pipeline network the gas is shipped to the markets in Russia or outside (CIS and Europe). The maximum capacity that could be shipped from Turkmenistan and Uzbekistan to Russia was approximately 100 bcm/y, though the capacity was reduced by poor technical condition (see also Chapter 9) [EIA 2007]. Central Asia also possesses a solid internal network.169

Immediately after the ‘collapse’ Turkmenistan demanded that the other former Soviet republics started paying for the supplies of gas in hard currencies at global prices, which led to a large number of conflicts about payment defaults and interruptions in the gas supply. The Turkmen supply problems with Ukraine (up to 25 bcm/y) were the most noticeable. Because of these problems, trade based on bilateral barter was initially used between Ukraine and Turkmenistan, without any direct interference from Gazprom [Stern 1999]. Subsequently, from 1994 onward, Itera became increasingly involved in a large portion of the gas supplies, as an intermediary. Gazprom permitted this course of action, owing to continuing payment difficulties and the personal financial interests of the management and politicians (see Section 6.2.1). In November 1995, Gazprom (45 percent), Turkmenneftegaz (51 percent) and Itera (4 percent) set up a joint venture (Turkmenrosgaz) for the purpose of selling gas [Stern 1999; Åslund 2007]. Mid-1997, Turkmenrosgaz was dissolved unilaterally by the Turkmen, owing to Itera’s increasing debt, and the gas export to Ukraine was discontinued until 1999.170 In January 1999, the supplies were started up once more, with Itera becoming responsible for transit and sales to Ukraine, without Gazprom’s involvement. The other Central Asian countries used similar methods

169 The principal export pipeline for gas from Uzbekistan is the Tashkent-Bishkek-Almaty gas pipeline. That pipeline passes through Kyrgyzstan to Kazakhstan, and has a maximum capacity of 4.5 bcm/y. The supplies of gas often encountered difficulties caused by illegal tapping in Kyrgyzstan and by the irregular supply in Uzbekistan [EIA 2007].

170 In 1998, Uzbekistan exported a small volume to Ukraine when the Turkmen supplies ceased.
during the 1990s (with or without Gazprom’s involvement), though their exports were very minor [Stern 2005; Stern 1999].

Because of the diminishing exports to Russia and other former Soviet republics, Central Asia started looking for a different export strategy for marketing the gas and oil reserves, focusing initially on the Iranian, Turkish and Pakistani and Indian markets [Victor and Victor 2006]. The Turkmen gas pipeline to Iran was realised first, making it the first Central Asian export pipeline to circumvent Russian territory (with the exception of the pipelines within Central Asia). The Koرمزه-کورت کیپ گاز pipeline, as it is called, was built in 1997 and has a maximum capacity of 13.5 bcm/y (Turkmenistan supplied 6 bcm/y to Iran). The pipeline was linked to the Turkish gas network through Iran’s domestic gas network, using the Tabriz-Erzurum pipeline [EIA 2002].

Starting in March 1995, the possibility of constructing a gas pipeline from Turkmenistan through Afghanistan to Pakistan (and India), being possible markets, was concretely examined by the Central Asia Gas Pipeline Ltd. CentGas Consortium, which was led by Unocal of the US. That strategy was supported by the US government, though the political risks in Afghanistan caused Unocal to withdraw from the pipeline consortium in 1998 [Amineh 2003; EIA 2007].

The diversification of gas transport routes from Russia to the West, initially to Turkey, began midway through the 1990s, with Western help [Amineh 2003]. The Trans Caspian Gas Pipeline (TCGP) was the most concrete project, and tried to link the growing Turkish market with the gas fields in Turkmenistan (and Kazakhstan and Azerbaijan) by way of an offshore pipeline through the Caspian Sea, followed by an onshore pipeline through Azerbaijan and Georgia, without involving Russia or Iran. Despite a number of feasibility studies, the TCGP project was not realised during the 1990s, owing to a proactive strategy on the part of Gazprom and Russia in the various parts of the value chain, transit uncertainties around the Caspian Sea and market uncertainties, among other factors. Following the discovery of the Shah Deniz field in Azerbaijan in 1999, Azeri exports were effected through the South Caucasus Pipeline (SCP) to Turkey [EIA 2007].

At the end of the 1990s, Azerbaijan began to import gas from Turkmenistan, through Itera. Itera also supplied Georgia (up to 1.1 bcm/y) and Armenia (up to 1.51 bcm/y) with gas. It was not until 2003, following Itera’s dissolution, that Gazprom assumed the role of exporter. Twice, Gazprom supplied small volumes of gas to Georgia (in 1994: 0.4 bcm; in 1997: 0.1 bcm) [Stern 2005; Stern 1999].

The costs were $190 million. Of the Turkmen supplies, 35 percent was part of a barter agreement for the Iranian construction costs. The contract was not very solid. Iran’s internal economic problems and its economic isolation (caused by the Iran and Libya Sanctions Act) prevented it from developing itself further as a transit country [Amineh 2003]; see also Case 1 in Chapter 11.

See Case study 1 in Chapter 11 for a detailed analysis of the planned pipeline projects to the Turkish gas market that competed with Russia’s pipeline project Blue Stream.
There was not a great deal of interest in a gas corridor to the Orient during the 1990s. It was not until the mid-1990s that China started to import gas and oil. In 1995, an agreement was signed to have China’s state-controlled oil and gas company China National Petroleum Corporation (CNPC), ExxonMobil and Mitsubishi carry out a feasibility study. However, financing, legal and political transit-related issues prevented the project from being realised during the 1990s [Amineh 2003]. See Map 8.2 for a current geographic overview of the pipeline projects.

6.4 Gas sales and transit issues in Ukraine and Belarus
The disappearance of the Soviet Union and the CMEA meant that there was no longer a joint regulation model for gas transports. At the same time, ownership of parts of the UGTS reverted to new governments and national and private gas companies, increasing the risks associated with gas supplies and transit to all of Europe. During the 1990s, it gradually became apparent that the CMEA and Baltic countries would choose the EU’s energy acquis, which resulted in contracts based on market conditions becoming more or less standard (see Chapter 7). The organisational transition of gas transports and sales in the former Soviet states (Ukraine, Belarus and Moldova) was different. The ‘old contracts’, under which the regulated prices were low, remained in effect, while moreover the economic and political influence from Russia continued to be felt, despite the fact that Western influences also increased [CIEP 2008]. Until 1994, Gazprom was exclusively responsible for Russian exports to the CIS. Itera took over the role of provider and shipper of Central Asian (mostly Turkmen) gas to the former Soviet republics [Stern 2005].

The emphasis in this section is on the transit dealings between Russia and Ukraine and Belarus, since the transit and storage of gas in Ukraine (and Belarus) is vital to supplies to Europe. At the end of the 1990s, the Ukrainian transit represented more than 90 percent of Russia’s gas exports in Europe. In 1999, additional gas supplies were started by way of Belarus, causing that share to drop slightly (to around 80 percent). Moreover, most of Russia’s (and Turkmen) exports to former Soviet countries were destined for Ukraine and Belarus [Victor and Victor 2006].

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174 It was also thought that the gas from Central Asia might stimulate the development of the gas fields in China’s Xinjiang region and the transport of that gas to the eastern and southern parts of China.

175 For a detailed and chronological analysis of the transit dealings between Ukraine and Russia and Belarus and Russia, see for example Stern [2005] and Pirani et al. [2009].

176 The gas flows to Belarus, the Baltic states and Finland did hardly involve any transit countries [Stern 2005].

177 Of the total gas trade within the CIS, Ukraine (and Belarus) represented 75 percent of the total import. The Russian transit is also very important for the economy of Ukraine (and later also for that of Belarus) [Stern 2005].
6.4.1 Gas transit and sales relation between Ukraine and Russia
The disintegration of the Soviet value chain caused commercial and political conflicts between Russia and Ukraine about the transit and sales of gas. The gas network in Ukraine was already well developed during the Soviet era, because:

- Ukraine historically produces its own gas, though the gas production dropped dramatically during the 1980s and 1990s (40 bcm in 1985, 26.2 bcm in 1990 and 16.7 bcm in 2000) [BP 2008].
- the consumption of gas in Ukraine was substantial, despite diminishing in the 1990s as a result of the economic decline and the increased prices of imported gas (from 127.8 bcm in 1990 to 73.1 bcm in 2000) [BP 2008]. The differences between the volume consumed and the domestic production had to be imported from Russia and Turkmenistan, which called for pipelines.
- Ukraine’s geographic position made it suitable for the Russian transit routes to Europe [Gustafson and Sager 2003]. Moreover, its geographic situation at the edge of the Soviet Union meant that Ukraine was also a suitable location for the storage facilities [Victor and Victor 2006].

Ukrgazprom, and from 1998 onward state enterprise Naftogaz Ukraine, became responsible for the gas market in Ukraine [Stern 2005]. Almost 95 percent of the domestic gas production was controlled by Naftogaz or its subsidiaries. Subsidiary Ukrtransgaz had a monopoly on gas transmissions and storage in and through Ukraine [IEA 2006]. Moreover, Naftogaz Ukraine was responsible for most of the gas imports from Russia and Central Asia [IEA 2006]. Besides the state enterprise, intermediaries such as Itera also played an important part in the supplies of gas in Ukraine [IEA 2006; Stern 2005].

Although Ukraine depended on Russian gas imports, the country’s economic instability meant that it was unable to higher prices demanded. Russia was unable to take any hard measures to force Ukraine to pay the higher prices, because the transit of Russian gas to Europe depended on Ukraine, among other things. Despite various resolutions and agreements, involving independent gas traders and Turkmen gas, the relationship between Ukraine and Russia was not very strong during the 1990s. That relationship was characterised by a series of seven ‘issues’ that were the cause or consequence of the problems in the relationship [Gustafson and Sager 2003; Stern 2005].

1) During the process of transition to a market-driven system during the 1990s, the former Soviet countries continued to profit from the low prices for gas from Russia.

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178 To ensure the certainty of supply of Russian export gas (originating mostly from the West Siberian gas fields) and to allow for the seasonal fluctuations in the European demand for gas, it was necessary to store gas relatively close to the market. In addition, gas storage was also necessitated by technical complications in the network, owing to the combination of an area with difficult access and the poor quality of the materials [Victor and Victor 2006].

179 Chornomornaftogaz was responsible for gas transmissions in the Crimea.
and Turkmenistan. The gas prices were regulated and 'linked' to certain price zones in Russia. Most of the former Soviet economies were unable to absorb exponential price increases in their economies. In addition, Gazprom used the low regulated prices and barter agreements (generally through intermediaries) to create an 'opening' to regain control over the gas network [Victor and Victor 2006; Stern 1999].

2) Ukraine encountered difficulties paying its gas bills. Besides Russia's transit payments in kind (approximately 25 bcm/y), Gazprom also supplied gas to Ukraine commercially. Until 1992, that supply was substantial (65-85 bcm/y), though starting in 1993 that share was reduced to 15-25 bcm/y. Intermediary Itera gradually took over Gazprom's role during the 1990s (see below).

3) During the cold winters, the volumes of gas consumed often exceeded the volumes arranged contractually. Ukraine illegally tapped some of the gas intended for transit to Europe from the network. The illegal tappings are estimated to have been as high as 10 bcm/y in some years [Gustafson en Sager 2003; Stern 2005].

4) The payment defaults and the gas consumption above contractual limits meant that Ukraine’s debts to Russia and Turkmenistan increased. The total debt was established in agreements, and repayment schedules were arranged using loans. The 1995 agreement established the debt as $1.4 billion. Payment defaults continued in the following years, which led Russia's claims to be adjusted upward [Stern 2005; Gustafson and Sager 2003].

5) Ukraine occasionally ‘re-exported’ gas (through intermediaries) to Poland and other countries, despite the prohibition under the destination clause. According to Russian sources, the gas volumes concerned was minor. It is unclear how regularly gas was re-exported [Gustafson and Sager 2003].

6) In extreme situations, when the negotiations about the outstanding debts and illegal gas tappings ground to a halt, both Russia and Turkmenistan blocked the supply of gas to Ukraine. Other former Soviet countries (such as Georgia and Belarus) that could not fulfil their payment obligations also encountered, or were threatened with, boycott measures. Itera’s increasing debts caused Turkmenistan to stop its gas supplies from 1997 to 1999 [Victor and Victor 2006; Stern 2005].

7) The intermediaries caused the system to become unstable and prevented a transparent, commercial relationship between Ukraine and Russia. In 1994, Itera became responsible a large part of the gas exports to Ukraine and other former Soviet states. The role of intermediaries was redefined frequently, and was based on complex barter agreements. Gazprom’s management allowed these transactions because they had personal interests [Goldman 2008; Åslund 2007]. Gazprom’s new management (from 2001 onward) shifted part of the exports to new entities working for their own (personal) advantage (Eural Transgaz from 2003 onward, and from 2005 on RusUkrEnergco)

180 At the end of the 1990s, Russian government sources determined that Ukraine’s debt to Russia had risen to $1.95-3 billion. Gazprom calculated a debt of $3 billion. Ukrainian sources maintained that the debt was around $1.41-2.8 billion, with the government of Ukraine using the higher estimate [Stern 2005; Gustafson and Sager 2003].
and dismantled Itera [Åslund 2007]. Itera undermined Gazprom’s control over the exports, and the Ukrainian industrial market became more profitable [Gustafson and Sagers 2003; Goldman 2008; Stern 2005].

During the 1990s, a series of intergovernmental and commercial agreements were signed, for example in 1994, 1998 and 2001, to resolve these problems. In 1998, the decline in foreign income from gas, caused by the low international oil and gas prices and the payment defaults in Russia, combined with the Russian financial crisis, increased the pressure on Gazprom and Russia to make the gas exports to the former Soviet states more profitable. The concept of active Russian policy was also stimulated by the continuing domestic problems (primarily political) in Ukraine, that country’s gradual political reorientation toward the West, Putin’s presidency and the change in management at Gazprom; see also Chapter 12 [Stern 2005].

6.4.2 Gas transit and sales relation between Belarus and Russia
The bilateral gas dealings between Russia and Belarus were less significant than those between Russia and Ukraine. In addition, production in Belarus was minimal (some 0.2 bcm/y) [EIA 2003]. Beltransgaz was responsible for import contracts and the Belarus transport network. In the 1990s, Gazprom’s sales in Belarus dropped from 17.6 bcm in 1992 to 10.8 bcm in 2000, and were replaced largely by Itera. Part of the transit through Ukraine passed through Belarus, using the Northern Light gas pipeline with a capacity of approximately 25 bcm/y. Russia also supplied gas to Poland by way of Belarus (7 bcm/y). From 1999 onward, transit through Belarus became more important with the construction of the Yamal-Europe Pipeline. The strong political and economic ties between Russia and Belarus meant that it was easier to realise Gazprom’s participation in new pipelines; see also Section 6.4.3 and Chapter 7 [Stern 2005]. By and large, Belarus had the same problems with importing Russian gas as Ukraine did [Stern 1999; Stern 2005].

6.4.3 Gazprom’s mitigation strategy for transit risks
Gazprom used a two-pronged strategy to mitigate the increased transit risks. Firstly, it tried to increase its control over the current pipeline network to Europe. Secondly, it lowered the project risks by diversifying the transport routes to Europe.

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181 In addition to Ukraine and Belarus, Gazprom also supplies gas to Moldova, and depends on transit. However, Moldova’s purchases of Russian gas are very minor (2-4 bcm/y). Moldova was encumbered by high debts owing to non-fulfilment of its obligations, though. The greatest problem of the TransDniestr region were payment defaulters. The volume of transit through Moldova is approximately 20 bcm/y, intended for the gas market of South-eastern Europe, including Turkey. In 1998, a consortium was put together to manage the existing assets in Moldova’s gas market. The new entity, Moldova Gas, was owned by Gazprom (50 percent), Moldova (35.3 percent), the TransDniestr region (13.44 percent) and individual shareholders (1.23 percent; mostly employees) [Stern 1999; Stern 2005].

182 In 1998 estimates of the total debt varied from $250 to $500 million [Stern 2005].

183 Another method to reduce transit risks was to build additional gas storage facilities; see also chapters 10 and 12.
Throughout the 1990s, various pipeline consortiums were proposed for the purpose of mitigating the operational risks and risks of interruptions by dividing them between multiple private and public parties. Initially, Gazprom tried to convince Ukraine’s government to transfer operational control over the pipeline system to a joint venture or through directly held ownership. However, the government and parliament of Ukraine rejected such propositions, based on considerations of security of supply (i.e. in order to reduce third-party influences) [IEA 2006; Gustafson and Sager 2003]. In 1996, Royal Dutch Shell proposed an international consortium in which Russia was also to participate, though that proposal was rejected in 1997, because Shell’s bid was too low [Gustafson and Sager 2003; Stern 2005]. Three years later, Ukraine presented a serious proposal, suggesting that 50 percent of the shares less one share be sold to international operators. Gazprom requested part of the shares in exchange for repayment of the outstanding debts. The Russian request caused a nationalist reaction in Ukraine, leading to the consortium proposal being rejected [Gustafson and Sager 2003].\(^{184}\) Another international consortium proposed later involved the Ukrainian and Russian parties, the German government and Ruhrgas [Gustafson and Sager 2003; Gustafson and Telyan 2007].\(^{185}\) Following the Orange Revolution in 2004/05 – which resulted in the election of pro-Western President Yushchenko – that consortium proposal disappeared from the agenda (see Chapter 12) [Stern 2005; Gustafson and Telyan 2007].

Various proposals were also put forward in Belarus to regain control over the network, either through ownership interest or else through a joint venture. Gazprom achieved success with the construction of the Yamal-Europe pipeline, by acquiring full ownership of the Belarus’ section. Agreements for gas sales and transit from 1993 and 1995 also included lease arrangements between Gazprom and transmission company Beltransgaz. Gazprom increased its supplies to Belarus in exchange for leasing the current Belarus gas network. During the 1990s, an ownership interest in the Belarus gas network was unrealistic, even in the form of a joint venture [Stern 2005].

It had not proved to be easy for Gazprom to regain control over the pipeline and storage system of Ukraine. To improve its bargaining position for purposes of determining the tariffs and royalties in dealings with transit countries, attempts were made to build up a diversified gas transport network [Gustafson and Sager 2003]. Essentially, the new pipeline projects were not realised purely in order to avoid Ukraine [Stern 2005; Victor and

\(^{184}\) In 2001, the US Embassy presented a consortium proposal to block Russian participation, though that proposal was no longer mentioned when the relationship between the US and Russia improved after the terrorist attacks on 11 September 2001 [Gustafson and Sager 2003].

\(^{185}\) The initial consortium concept from 2002 concerned the entire gas pipeline network and storage facilities. That concept was modified in 2003, as a result of which the consortium would only gain control over the new pipelines.
Midway through the 1990s, the first pipeline project not passing through Ukraine was launched: the Yamal-Europe pipeline, through Belarus and Poland. An alternative to the Yamal-Europe pipeline was a direct connection between Russia and Germany, via the Baltic Sea, and continuing to the UK – the North European Gas Pipeline (NEGP) – which, however, failed to materialise during the 1990s. In the gas market of Southeastern Europe, the Blue Stream pipeline, as it was called, provided a direct connection between Russia and Turkey, without involving Ukraine or any other transit countries (see Case study 1 in Chapter 11). However, Ukraine continued to play a vital role in the transit and storage of Russian gas to Europe.

6.5 Conclusion
After the disintegration of the Soviet Union, Moscow lost control over the former Soviet republics and the CMEA and a unipolar international system arose. One implication for the gas sector was that the pipeline system in that area was broken up. Ownership reverted to new governments and national gas companies. Similarly, the joint regulation model disappeared.

Market concepts were introduced to Russia in the 1990s. The managers of state enterprises initially gained control over the Russian economy, as a result of what is called ‘voucher privatisation’, although the process of privatisation was slow. In 1995, the privatisation process gained momentum with the ‘loans for shares’ programme introduced to finance the budget deficit. Loans were granted to the Russian government, in exchange for shares in the state enterprises. As a result of this privatisation process, the financial and industrial groups, more commonly known as oligarchs, gained control over many sectors (including the oil sector) owing to their positions in the financial sector and their political connections. The process of reform in the 1990s resulted in the oil sector being broken up during that time. Owing to the nature of the industry and the strong political lobby, the gas sector remained reasonably centralised, although part of it fell into private possession.

\[1\] In 2000, Gazprom put forward one pipeline proposal with the sole purpose of circumventing Ukraine, to provide a direct connection between Belarus and Poland (and continuing to Slovakia) and take over 25 percent – ultimately increasing to 50 percent – of the transit through Ukraine. The proposal proved impossible to finance, because European companies could not utilise the capacity. Moreover, Poland, with its friendly relations with Ukraine, was not in favour of such a plan, which was seen to be anti-Ukrainian [Stern 2005; Victor and Victor 2006].

\[2\] The first time this option was considered was around 1990, by British-Russian joint venture Sovgazco. According to Victor and Victor (2006), such a route would have been 50 percent more expensive than an onshore route and impossible to finance. The North Transgas joint venture (a partnership between Gazprom and Fortum of Finland) conducted a feasibility study into the offshore section of the project between 1997 and 1999. That project would provide Scandinavia, among other regions, with Russian gas from the offshore Shokman field in the Barents Sea. Owing to the continuing transit problems in Ukraine, Belarus and Poland, the NEGP concept was once more examined at the beginning of the 21st century, this time with Germany and the Netherlands as the partners; see Case study 3 in Chapter 11 [Nord Stream 2008; Stern 2005; Gustafson and Sager 2003]. Other pipeline options that were considered went by way of Belarus and Kaliningrad and through the Baltic states and Belarus.
The demand for gas in Russia and the other former Soviet republics fell sharply, because of the economic decline and the rising regulated prices (though they remained below European market prices). A further rise in the regulated prices was politically unacceptable, as were hard measures against payment defaulters. As such, the only way in which the gas industry could be made more profitable was to turn to the profitable European export market. The fact that production remained relatively stable, moreover, made it possible to greatly increase the volumes without making any new large-scale investments in the production area.

Because the internal demand for gas in Russia vanished, the imports from the Caspian region were less vital during the early 1990s. Since the Caspian countries were partially dependent on transport by pipeline to Russia, they started looking for alternative markets. That policy was supported by the West (and by the US in particular). Structural internal socio-economic problems, such as a poorly functioning legal system, caused delays in the investments. Combined with the low oil and gas prices, heavy competition in new off-take markets and transit risks, which had a downward effect on profitability, this meant that only a small number of alternative pipeline projects were realised.

Because most of Russia’s exports to Europe passed through Ukraine (and Belarus), the loss of control over the pipeline systems in Ukraine and Belarus increased the risks attached to supplies and transit of gas. The decline in the economy and the increased regulated gas prices led to payment defaults in the CIS. Combined with volumes of gas above contractual limits during cold winters, the debts to Russia and Turkmenistan rose and the supply of gas was occasionally shut down (for short periods), or that possibility was threatened. During the 1990s, intermediaries (particularly Itera) gradually became responsible for part of the gas exports. Itera traded the gas using complex barter agreements, with most of the gas originating in Turkmenistan. Gazprom’s management allowed these transactions because they had personal interests, which delayed the transition to a transparent, commercial relationship between Ukraine and Russia.

Attempts were made to mitigate the transit risks, by reinforcing the control over and ownership of existing and new gas networks. Various (mostly international) pipeline consortiums were proposed during the 1990s, to divide the operational risks and risks of interruption between supplier, shipper and if possible buyer. In Ukraine, this strategy met with little success, mostly because of political objections. The strategy was more successful in Belarus, and resulted in the Yamal-Europe pipeline, among other things. In addition, the specific country-related risk attached to transit through Ukraine was mitigated by constructing a diversified network to Europe, using the Yamal-Europe pipeline and the Blue Stream pipeline to Turkey that crosses the Black Sea. However, those pipelines were not constructed purely for the purpose of circumventing Ukraine.
In response to the lack of control over the economic crisis of the 1990s, Putin tried to regain the control over Russian society. Politically, Putin advocated centralised federal power. The impact of this policy was reinforced by improved coordination and communication between separate parties. Economically, various measures were implemented, including further market and tax reforms. The government’s control over the Russian energy market was increased. In addition, the higher oil prices (resulting from OPEC’s stricter production policy from 1999 onward) generated more export income and an improved self-awareness. As such, the perception of decision-makers within Russian government was to make energy the central factor in Russia’s strategy for stimulating its economy and conducting an effective foreign policy; see Chapter 10.