

# 7. International arms transfers

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## I. Introduction

Since 2005 there has been an upward trend in the volume of deliveries of major conventional weapons. The annual average level for the period 2004–2008 was 21 per cent higher than the annual average for 2000–2004, when the level was the lowest since the 1960s. The United States and Russia remained by far the largest exporters, followed by Germany, France and the United Kingdom. These five countries have been the top five suppliers since the end of the cold war, and account for at least three-quarters of all exports annually.

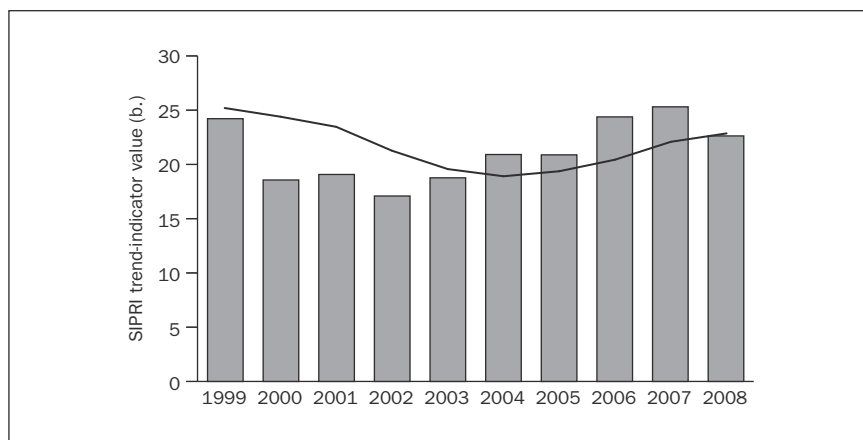
Section II of this chapter presents the major trends in global arms transfers for the period 2004–2008 and discusses the main suppliers—the USA, Russia and seven European Union (EU) members—and the main recipients—China and India. It also presents an estimate of the financial value of the global arms trade in 2007 and addresses the potential impact of the financial crisis and lower oil prices on arms transfers. Section III discusses arms transfers to Sri Lanka, the scene of one of the bloodiest armed conflicts of 2008. Section IV presents the conclusions.

Appendix 7A provides data on the recipients and suppliers of major conventional weapons in 2004–2008 and presents the methodology of the data collection. Appendix 7B presents official data on the financial value of the arms trade in 1998–2007. Appendix 7C describes the current status of existing mechanisms for international transparency in arms transfers. Information on orders and deliveries of major conventional weapons referred to here is taken from the SIPRI Arms Transfers Database.<sup>1</sup>

## II. Major trends in international arms transfers

SIPRI measures trends in transfers of major conventional weapons in two ways. First, it identifies the volume of transfers by using a unique method-

<sup>1</sup> The SIPRI Arms Transfers Database, with data on all arms transfers between 1950 and 2008, is available at <<http://armstrade.sipri.org/>>. The data for 2008 and for 2004–2008 on which much of this chapter is based is given in the 'Register of major conventional weapon transfers, 2008' and the 'Register of major conventional weapons, 2004–2008', which are available via this URL. The data on which this chapter is based is valid as of 10 Feb. 2009. The figures in this chapter may differ from those in previous editions of the SIPRI Yearbook because the SIPRI Arms Transfers Database is constantly updated.



**Figure 7.1** The trend in international transfers of major conventional weapons, 1999–2008

*Note:* The bar graph shows annual totals and the line graph shows the five-year moving average. Five-year averages are plotted at the last year of each five-year period. See appendix 7A for an explanation of the SIPRI trend-indicator value.

*Source:* SIPRI Arms Transfers Database, as of 10 Feb. 2009, <<http://armstrade.sipri.org>>.

ology resulting in a SIPRI trend-indicator value (TIV).<sup>2</sup> Second, for almost 10 years SIPRI has used the limited information that is available on the financial value of the arms trade to provide an overview of the international arms trade (see appendix 7B). These two data sets measure arms transfers in different ways, but both show a roughly similar upward trend.

### The trends in international arms transfers, 2004–2008

The yearly upward trend in arms transfers that started in 2005 continued in 2008 (see figure 7.1).<sup>3</sup> The annual average level for the period 2004–2008 was 21 per cent higher than that for 2000–2004 when the level was

<sup>2</sup> SIPRI data on arms transfers refers to actual deliveries of major conventional weapons. To permit comparison between the data on deliveries of different weapons and identification of general trends, SIPRI uses a trend-indicator value. TIVs give an indication only of the volume of international arms transfers and not of the actual financial values of such transfers. Thus, they are not comparable to economic statistics such as gross domestic product or export and import figures. The method used in calculating the TIV is described in appendix 7A and a more detailed description is available on the SIPRI Arms Transfers Programme website at <[http://www.sipri.org/contents/arms\\_trad/atmethods.html](http://www.sipri.org/contents/arms_trad/atmethods.html)>.

<sup>3</sup> Because yearly delivery schedules may vary significantly and especially because data for the most recent year may be incomplete, data on 1-year periods is insufficient for reliable conclusions. A 5-year moving average is used as a more reliable measurement of trends. New information, among others that from the United Nations Register of Conventional Arms (UNROCA), on deliveries and the status of arms delivered in 2006 and 2007 significantly changed the estimates published in *SIPRI Yearbook 2008: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2008).

the lowest since the 1960s. The 2004–2008 average is, however, still lower than the level for any five-year period between the 1960s and 2001. The lower annual value for 2008 alone is likely to be the result of a lack of reliable information on recent arms deliveries.

For 2004–2008 the USA, Russia, Germany, France and the UK accounted for 78 per cent of all exports (see table 7A.2). SIPRI identified 63 countries as exporters of major weapons in 2004–2008; of these, 14 each accounted for at least 1 per cent of the global total. China remained the largest importer for 2004–2008, followed by India, the United Arab Emirates (UAE), the Republic of Korea (ROK, or South Korea) and Greece (see table 7A.1). More year-to-year fluctuation is evident among importers than exporters, but even here the list of the largest recipients has remained more or less unchanged in recent years. Based on five-year averages, China has led the list of importers since 2002, while India has been the second largest importer since 2003. All five top importers have been among the top 10 for the past 15 years. Imports are less concentrated: the top five importers for the 2004–2008 period accounted for only 35 per cent of imports (see table 7A.1). Of the 147 countries, non-state armed groups (rebel forces) and international organizations identified as arms importers for 2004–2008, 26 accounted for at least 1 per cent of the global total. Europe and two areas of high international tension, East Asia and the Middle East, each accounted for 20–21 per cent of all imports, and South Asia, another area of high tension, accounted for 10 per cent.

### **The financial value of the international arms trade in 2007**

It is not possible to ascribe a precise financial value to the international arms trade. However, by aggregating financial data on the value of their arms exports released by the main supplier states, it is possible to make an indicative estimate. The estimated financial value of the international arms trade in 2007 was \$51.1 billion, which represents 0.3 per cent of world trade (see appendix 7B).<sup>4</sup> This figure is below the true figure because a number of significant exporters, including China, do not release data on the financial value of their arms exports. According to national data, the USA was the largest arms exporter in 2007, with exports worth \$12.8 billion; Russia was in second place, with \$7.4 billion; France was in third place, with \$6.2 billion; Israel was in fourth place, with \$4.4 billion; and the UK was in fifth place, with \$4.1 billion.<sup>5</sup>

<sup>4</sup> Trade of goods and services in 2007 amounted to \$17 130 billion. International Monetary Fund, International Financial Statistics online, <<http://www.imfstatistics.org/imf/>>.

<sup>5</sup> The figure for Israel's arms exports refers to 'contracts signed'. Unlike in previous years, Israel did not release a figure for the value of actual exports in 2007, only for contracts signed. All other figures refer to actual exports.

SIPRI bases the estimated financial value of the international arms trade on official government data published in either national reports on arms exports or public statements by government officials.<sup>6</sup> In 2008 France, the UK and the USA all released sets of data on the financial value of both their own and other states' arms exports.<sup>7</sup> The data sets differ considerably in terms of the ranking of the different exporters and the magnitude of their exports. Different choices of time period may account for some of the discrepancies. However, it is also clear that different methodologies and definitions are being used to compile the figures, further underscoring the lack of an agreed mechanism for measuring the financial value of the international arms trade.

### Major supplier developments, 2008

#### *The United States*

In the period 2004–2008 the USA accounted for 31 per cent of global deliveries of major conventional weapons, delivering them to 69 countries. Some 37 per cent of US deliveries went to the Middle East (including Turkey), 37 per cent to the Asia–Pacific region and 20 per cent to Europe (almost all to other North Atlantic Treaty Organization, NATO, members).<sup>8</sup>

The Middle East will remain a main destination for US weapons in future years. Egypt and Israel, which together account for 22 per cent of US deliveries for 2004–2008, remain tied to the USA, not least because a large part of the acquisitions of arms are paid for with US aid.<sup>9</sup> New large sales are also being negotiated with other Middle Eastern clients, among them deals valued at up to \$10.3 billion for Patriot Advanced Capability-3 (PAC-3) and Terminal High-Altitude Area Defense (THAAD) anti-ballistic

<sup>6</sup> On state participation in international, regional and national reporting mechanisms on international arms transfers see appendix 7C and table 7C.1. There are significant limitations on using official national data for assessing the financial value of the international arms trade. First, there is no internationally agreed definition of 'arms' and governments use different lists when collecting and reporting data on the financial value of their arms exports. Second, there is no standardized methodology for how to collect and report such data, with some states reporting on export licences issued or used and other states using data collected from customs agencies. Third, a number of states produce more than one data set based on different lists of goods or different methodologies.

<sup>7</sup> UK Trade & Investment (UKTI), Defence & Security Organisation, '2007 market review: UK top global defence exporter', 17 June 2008, <<http://www.deso.mod.uk/archive.htm>>; French Ministry of Defence, 'Rapport au Parlement: les exportations d'armement de la France en 2007' [Report to Parliament: the arms exports of France in 2007], Oct. 2008, <[http://www.defense.gouv.fr/defense/enjeux\\_defense/defense\\_au\\_parlement/rapports\\_d\\_activite/rapport\\_au\\_parlement\\_sur\\_les\\_exportations\\_d\\_armement\\_2007](http://www.defense.gouv.fr/defense/enjeux_defense/defense_au_parlement/rapports_d_activite/rapport_au_parlement_sur_les_exportations_d_armement_2007)>; and Grimmett, R. F., *Conventional Arms Transfers to Developing Nations, 2000–2007*, Congressional Research Service (CRS) Report for Congress RL34723 (US Congress, CRS: Washington, DC, 23 Oct. 2008).

<sup>8</sup> See table 7A.4 in appendix 7A.

<sup>9</sup> U.S. official: Obama won't cut military aid to Israel', *Haaretz*, 11 Mar. 2009. See also Holtom, P., Bromley, M. and Wezeman, P. D., 'International arms transfers', *SIPRI Yearbook 2008* (note 3), p. 297.

missile (ABM) surface-to-air missile (SAM) systems for the UAE and a potential \$15–20 billion modernization of the Saudi Navy with US weapons.<sup>10</sup> Iraq is becoming another major recipient of US arms. For 2004–2008 Iraq was the 28th largest recipient of arms globally, accounting for just 0.9 per cent of the global total, of which 40 per cent was delivered by the USA. Transfers to date have consisted mainly of light armoured vehicles for internal use. However, in 2008 Iraq requested almost 19 billion in sales from the USA, and more orders, including for 36 F-16 combat aircraft, are being discussed.<sup>11</sup> A \$2.16 billion deal for 140 M-1A1 tanks was signed in 2008.<sup>12</sup>

In Asia the USA remains committed to supply Pakistan with weapons for use against the Taliban and al-Qaeda. For 2004–2008 Pakistan accounted for 3 per cent of all US exports; 10 F-16A combat aircraft were delivered in 2008 and 18 more of the advanced F-16C version are on order. Pakistan's commitment to fight the Taliban is, however, questioned by some members of the US Congress, and the appropriateness of supplying advanced combat aircraft to Pakistan for counter-insurgency warfare has also been questioned.<sup>13</sup>

In late 2008 the Administration of US President George W. Bush agreed to supply large volumes of arms to Taiwan, including part of a \$12 billion package that had been promised in 2001.<sup>14</sup> The weapons in the package are mainly defensive in the Taiwanese context—anti-submarine warfare (ASW) aircraft, combat helicopters and ABM/SAM systems. Neither the most offensive components of the original package, eight submarines, nor the 66 new F-16 combat aircraft requested by Taiwan in 2006 were included. It seems unlikely that President Barack Obama's Administration will radically change US policy on arms sales to Taiwan. Within a week of taking office, the Obama Administration approved a \$154 million order for upgrades of Taiwan's Patriot SAM systems, making them ready to use PAC-3 missiles that have an ABM capability.<sup>15</sup>

<sup>10</sup> 'Pentagon eyes huge potential Saudi deal', Reuters, 15 Dec. 2008, <<http://www.reuters.com/article/idUSTRE4BE62520081215>>; and Raytheon, 'Raytheon awarded not-to-exceed \$3.3 billion Patriot order for the UAE', News release, 18 Dec. 2008, <<http://raytheon.mediaroom.com/index.php?s=43&item=1160&pagetemplate=release>>.

<sup>11</sup> Requests do not automatically translate into orders. See chapter 5, section VIII, for a list of requested orders from the USA in 2008.

<sup>12</sup> Defense Security Cooperation Agency, 'Iraq—M1A1 and upgrade to M1AIM Abrams tanks', News release, 31 July 2008, <<http://www.dsca.mil/>>; and Operation Iraqi Freedom, 'Iraqi army begin M1A1 tank training', Multi-National Force—Iraq website, 25 Dec. 2008, <[http://www.mnf-iraq.com/index.php?option=com\\_content&task=view&id=24571&Itemid=225](http://www.mnf-iraq.com/index.php?option=com_content&task=view&id=24571&Itemid=225)>.

<sup>13</sup> US House of Representatives, 'Defeating al-Qaeda's air force: Pakistan's F-16 program in the fight against terrorism', Hearing before the Subcommittee on the Middle East and South Asia of the Committee of Foreign Affairs, 16 Sep. 2008, <[http://hirc.house.gov/hearing\\_notice.asp?id=1030](http://hirc.house.gov/hearing_notice.asp?id=1030)>.

<sup>14</sup> See chapter 5 in this volume.

<sup>15</sup> Lowther, W., 'Raytheon welcomes PAC-3 deal', *Taipei Times*, 29 Jan. 2009.

The USA is likely to remain the most important exporter of arms. From US financial year 2006 on there has been a massive increase in the value of orders under the Foreign Military Sales (FMS) programme, most of which will only be delivered after a few years.<sup>16</sup> There has been an even bigger increase in the value of official requests from countries to be allowed to buy US equipment under the FMS programme.<sup>17</sup> It is, however, not certain if this increase in requests will also be reflected in a corresponding increase in transfers since the requests may not lead to orders.

### *Russia*

In the period 2004–2008 Russia accounted for 25 per cent of global deliveries of major conventional weapons, with deliveries to 46 countries. Almost 71 per cent of these deliveries were to Asia. China and India remain the most important recipients of Russian weapons, accounting for 42 and 20 per cent of such exports, respectively. However, as discussed below, Russian arms exports to China in 2008 were at their lowest level since 1999 and are unlikely to rise again. Russia is thus in need of other markets to earn enough from exports to finance research and development and the recapitalization of its arms industry. Arms exports are not only seen as commercial business. In July 2008 the general director of Rosoboron-export, Anatoly Isaikin, stated that arms exports are ‘an instrument for restoring the influence of Russia in different regions of the world, realizing our foreign, political and economic policies’.<sup>18</sup>

Russia’s efforts to sell weapons in Latin America have yielded only moderate success beyond Venezuela. For the period 2004–2008 Venezuela accounted for 7 per cent of Russian arms exports and for almost all Russian exports to Latin America. In 2008 the remaining weapons ordered in 2006 and 2007, including the last of 24 Su-30MK combat aircraft, were delivered to Venezuela. There was much speculation that there would be another round of Venezuelan orders—including three submarines for \$1.4 billion, armoured vehicles, combat helicopters, tanks, transport aircraft and various air-defence systems—financed in part by Russian credits.<sup>19</sup> While it was expected that deals would be signed during 2008, this did not happen.

<sup>16</sup> The FMS programme is one major part of US arms sales; the other is direct commercial sales. Berrigan, F. and Hartung, W. D., ‘U.S. weapons at war 2008: beyond the Bush legacy’, New America Foundation, Washington, DC, Dec. 2008, <[http://www.newamerica.net/publications/policy/u\\_s\\_weapons\\_war\\_2008\\_0](http://www.newamerica.net/publications/policy/u_s_weapons_war_2008_0)>.

<sup>17</sup> Berrigan and Hartung (note 16).

<sup>18</sup> Chernyak, I., [Merchants of fire], *Rossiiskaya Gazeta*, 9 July 2008.

<sup>19</sup> ‘Russia, Venezuela may sign \$1.4bln contract for three subs in April’, RIA-Novosti, 5 Feb. 2008, <<http://en.rian.ru/russia/20080205/98423524.html>>; Higuera, J., ‘Venezuela on a buying spree’, *Jane’s Defence Weekly*, 21 May 2008; ‘Russia to lend Venezuela \$1bn for military cooperation’, *Kommersant*, 25 Sep. 2008; ‘Hugo Chavez undergoes conversion’, *Kommersant*, 22 July 2008; and ‘Russia–Venezuela talks bring energy, military agreements’, RIA-Novosti, 27 Nov. 2008, <<http://en.rian.ru/russia/20081127/118564345.html>>.

Russia signed a \$300 million deal for 12 combat helicopters with Brazil, but France, not Russia, won a €1.9 billion (\$2.7 billion) order for 50 transport helicopters, cashing in on long-standing industrial cooperation.<sup>20</sup>

North Africa and the Middle East have also been targeted by Russia. In 2006 Algeria placed a major order for Russian weapons. The start of deliveries of Su-30MK combat aircraft and ongoing deliveries of T-90 tanks and BMP-2 armoured vehicles from Russia meant that in 2008 Algeria was the largest importer of Russian weapons and jumped from 24th position in global imports for 2003–2007 to 13th for 2004–2008. However, in 2008 Algeria also took the unusual step of terminating a \$1.3 billion contract for 34 MiG-29SMT combat aircraft and returned 15 aircraft already delivered, claiming that they were not up to the standards agreed in the contract.<sup>21</sup> There was speculation that Algeria would acquire the Su-30MK or the more advanced Su-35 combat aircraft to replace the MiG-29, but no orders have been reported.<sup>22</sup> The Algerian acquisitions have caused neighbouring Morocco to order new combat aircraft, land systems and ships from France, the Netherlands and the USA as well as from Russia.<sup>23</sup>

Russia, along with several other countries, including France, Italy and the UK, has courted Libya since the United Nations arms embargo on Libya was lifted in 2003. Before the embargo was established in 1992, Libya was a significant market for weapons and the expectation was that it would again order substantial amounts. However, contacts with France, Italy and the UK did not lead to any large orders. In a deal similar to its 2006 arms sales to Algeria, in April 2008 Russia offered \$3 billion worth of arms contracts to Libya in exchange for writing off Libya's \$4.5 billion debt to Russia, but Libya was reportedly not interested.<sup>24</sup> The only contracts signed were for an estimated \$300 million worth of spare parts, maintenance and upgrades

<sup>20</sup> 'Brazil signs air force deal for Mi-35 attack helicopters', *Flight International*, 2 Dec. 2008; and 'Brazil signs \$1B+ production MoU for Cougar helicopters', *Defense Industry Daily*, 23 Dec. 2008.

<sup>21</sup> 'No threat to Russian–Algerian deal after MiG-29 flop—official', RIA-Novosti, 24 Mar. 2008, <<http://en.rian.ru/world/20080324/102050610.html>>. The 34 MiG-29 combat aircraft ordered by Algeria will now be purchased by the Russian military. 'Algeria's MiGs to land in Russia', *Kommersant*, 2 Oct. 2008; and Makienko, K., 'Crisis: Algeria refuses delivery of MiG-29SMT fighters', *Moscow Defense Brief*, no. 1 (2008). In recent years India has also complained about similar problems with Russian weapons (see below), but the quality issue is not restricted to Russian arms sales. E.g. in 2005 Brunei refused delivery of 3 frigates from the UK citing below-specification issues, and in 2008 New Zealand returned several patrol ships to their Australian producer for the same reason. *Indian Defence Yearbook 2008* (Natraj Publishers: Dehra Dun, 2008), pp. 169, 172; Scott, R., 'BAE Systems, Brunei OPV dispute nears resolution', *Jane's Naval Forces*, 8 Sep. 2006; and Gower, P., 'Navy ships project hard to keep afloat', *New Zealand Herald*, 11 Dec. 2008.

<sup>22</sup> 'Algeria to change MiG for Su', *Kommersant*, 15 May 2008; and 'Russia keen to sell latest jet to Malaysia', *The Star* (New Delhi), 21 July 2008.

<sup>23</sup> 'Inside story—North African arms race', *AlJazeera English*, 15 Apr. 2008; and 'Russia peddles weapons to Algeria, Morocco', *Middle East Newsline*, 3 Apr. 2009, <<http://www.menewline.com/article-3169-Russia-Peddles-Weapons-To-Algeria.aspx>>.

<sup>24</sup> The debt is related to arms deliveries from the Soviet Union to Libya. [Last duty of the president], *Vedomosti*, 15 Apr. 2008; Gabuyev, A. et al., 'Vladimir Putin found substitute for Algeria', *Kommersant*, 16 Apr. 2008; and 'Libya gets Russia's due', *Kommersant*, 18 Apr. 2008.

for equipment procured by Libya from the Soviet Union. In November 2008 Libyan leader Muammar Qadhafi visited Moscow but, rather than concluding arms deals, he revealed that Russia faced competition from Belarus and Ukraine for Libyan orders of armoured vehicles, air defence systems and aircraft.<sup>25</sup>

In July 2008 it was reported that Saudi Arabia was interested in buying Russia weapons for \$2.2 billion on the condition that Russia would limit its cooperation with Iran. Russia officially confirmed that such discussions had taken place but denied a possible link between a Saudi order and Russian cooperation with Iran.<sup>26</sup> At the end of 2008 Russia announced that it would supply Iran with 'defensive' weapons (a term generally believed to mean air defence systems), but not with S-300 (SA-10) long-range SAM systems.<sup>27</sup> However, early in 2009 it became clear that Russia will honour a 2007 contract for delivery of the S-300 to Iran.<sup>28</sup>

Despite the lack of new orders from important clients, such as China or Venezuela, by October 2008 Russia still had a reported \$30 billion backlog of orders.<sup>29</sup> The backlog and increased orders from the Russian Government are so extensive that the Russian arms industry, with its outdated production equipment, is having trouble keeping up. Russian President Dmitry Medvedev stated that 'we need to understand that the growing volume of orders . . . represents a serious test for the Russian defence industry and the production capacities of our businesses', echoing comments made by Sergei Chemezov, head of Rostekhnologii (the state holding company for much of the Russian arms industry).<sup>30</sup> The Russian Government promised financial assistance to the arms industry in 2008 for modernization of production facilities.<sup>31</sup>

<sup>25</sup> 'Libyan leader visits Ukraine', Agence France-Presse, 4 Nov. 2008, <[http://afp.google.com/article/ALeqM5iWttifzl0aFhUZDdH-qe\\_heJRGUg](http://afp.google.com/article/ALeqM5iWttifzl0aFhUZDdH-qe_heJRGUg)>. Ukraine reported delivering more than 100 000 rifles to Libya in 2006–2007. See Holtom, P., 'Ukrainian exports of small arms and light weapons, 2004–2007', SIPRI Background Paper, Oct. 2008, <[http://books.sipri.org/product\\_info?c\\_product\\_id=369](http://books.sipri.org/product_info?c_product_id=369)>.

<sup>26</sup> Faulconbridge, G., 'Saudi offers Russia arms deal to curb Iran ties: paper', Reuters, 15 July 2008, <<http://www.reuters.com/article/worldNews/idUSL1541793320080715?sp=true>>.

<sup>27</sup> Ravid, B., 'Russia–Iran arms deal shows just how sanctions have stalled', *Haaretz*, 24 Dec. 2008.

<sup>28</sup> 'Russia concluded a contract for the delivery of air defense systems S-300 to Iran', ITAR-TASS, 18 Mar. 2009, <<http://www.itar-tass.com/eng/level2.html?NewsID=13689028&PageNum=2>>.

<sup>29</sup> Medvedev, D., Opening address at the session of the Commission for Military–Technical Cooperation with Foreign States, Moscow, 28 Oct. 2008, <[http://www.kremlin.ru/eng/text/speeches/2008/10/28/1838\\_type82913\\_208467.shtml](http://www.kremlin.ru/eng/text/speeches/2008/10/28/1838_type82913_208467.shtml)>.

<sup>30</sup> Medvedev (note 29). On several occasions during 2008 and 2009 Chemezov noted that there are problems in the Russian arms industry with regard to 'filling foreign orders' because of a lack of capital investment. [Sergei Chemezov: 'There is no united oil' . . . The Second Congress of the Union of Machine-builders/Engineers of Russia on 19 February in Izhevsk], *Nezavisimaya gazeta*, 20 Feb. 2008; and Isachenkov, V., 'Russia focuses on upgrading its nuclear arsenals', Associated Press, 25 Feb. 2009, <<http://www.ohio.com/news/world/40288307.html>>.

<sup>31</sup> 'Russia: arms exports to top \$8 billion', *New York Times*, 16 Dec. 2008.



### *European Union*

The members of the European Union accounted for 34 per cent of deliveries in the period 2004–2008, more than the USA or Russia.<sup>32</sup> Exports by EU members to non-EU recipients accounted for 67 per cent of the combined total exports of EU members and for 23 per cent of global deliveries. Seven of the top 10 exporters of major conventional weapons were EU members—France, Germany, Italy, the Netherlands, Spain, Sweden and the UK—and 21 of the 27 EU members were exporters of major conventional weapons in 2004–2008. After the EU, Asia and the Middle East (including Turkey) are the most important destinations for exports by EU members: 22 per cent of exports went to Asia and 19 per cent to the Middle East.

European suppliers have signed major orders and even bigger ‘agreements in principle’ with Middle Eastern countries, particularly Saudi Arabia, but India and the USA are also perceived as important future markets. The USA was the seventh largest arms importer in 2004–2008, with almost half of its imports coming from the EU. The USA was also the largest recipient of British major weapons: 21 per cent of British exports in 2004–2008 were to the USA. In several high-profile competitions European products were favoured over products from US competitors. Such products included the EC-145 helicopter, produced by the German part of French–German Eurocopter, that won a \$3 billion order in 2006 and the Italian C-27J transport aircraft that won a \$2 billion order in 2007.<sup>33</sup> A European aircraft from Airbus appeared to have beaten the US producer Boeing to a very large US order (valued at up to \$40 billion over 20 years with possible follow-on orders of up to \$80 billion) for 179 large tanker–transport aircraft. However, the purchasing process was halted and a new competition will be launched in 2009 amid intense political pressure from US politicians and European politicians lobbying for their respective companies.<sup>34</sup> It should, however, be noted that much of this equipment of non-US design is produced in the USA, often in cooperation with a US company, under US designation and with a high US content.

The strong competition that exists among EU members was exemplified in 2008 by the competition for submarine exports. In December 2008 France signed a €8.6 billion (\$11.3 billion) agreement with Brazil that

<sup>32</sup> This is based on the combined deliveries of all 27 EU members for the 5-year period 2004–2008.

<sup>33</sup> Even the US President may soon fly in a European helicopter after the Italian–British EH-101 helicopter was selected in 2005 as the new transport helicopter for US Government VIP transport. However, the programme is currently being reviewed and may be cancelled. Harrington, C., ‘Washington divided on plans to cancel VH-71 presidential helicopter programme’, *Jane’s Defence Industry*, 1 May 2009.

<sup>34</sup> Hamilton, S., ‘The gift that keeps on giving’, *Armed Forces Journal*, Sep. 2008.

included four conventional and one nuclear-powered submarine, which would be fitted with a Brazilian nuclear reactor.<sup>35</sup> Since the 1980s Brazil has purchased German submarines and, according to some sources, an earlier plan to build a nuclear-powered submarine was based on a German design.<sup>36</sup> Germany, on the other hand, was by the end of 2008 close to signing a deal for three submarines with Pakistan, a traditional French client.<sup>37</sup> In 2005 Germany lost India as a customer for its submarines when India ordered French submarines.<sup>38</sup>

## Major recipient developments, 2008

### *China*

China was the largest importer of arms for the period 2004–2008. Its main arms supplier is Russia, which supplied 92 per cent of China's imports. However, the volume of arms delivered to China in 2007 and 2008 was at the lowest levels since 1999 and only about a third of the 2005 and 2006 levels. Since most contracts have been fulfilled, Russian deliveries are likely to remain at this lower level. The Chinese–Russian Joint Intergovernmental Commission on Military–Technical Cooperation, the main bilateral platform for arms negotiations, met in December 2008 for the first time since 2005. Although new contracts were discussed, no deals were announced.<sup>39</sup> Russian officials renegotiated the price of the 38 Il-76 transport aircraft and the Il-78 tanker aircraft, valued at about \$1 billion and the largest known ongoing Chinese–Russian deal, and deliveries were rescheduled to begin in 2010. However, continuing disagreement about the production of these aircraft between Russia and Uzbekistan, where the only assembly line for the aircraft is located, makes that schedule uncertain.<sup>40</sup>

Undeniably, the access that China has had to weapons and military technology from the Soviet Union and Russia since the end of the cold war has been the most important reason for China's increased military capabilities.

<sup>35</sup> Taverna, M. A. and Wall, R., 'Betting on Brazil', *Aviation Week & Space Technology*, 5 Jan. 2009; and Agence France-Presse, 'Sarkozy seals \$12 billion arms deal in Rio', *France 24*, 23 Dec. 2008, <<http://www.france24.com/en/20081223-sarkozy-lula-eu-brazil-summit-seal-arms-deal-financial-crisis-climate-change>>.

<sup>36</sup> 'Submarinos nucleares de ataque (SNA)', *Global Security.org*, 27 Apr. 2004, <<http://www.globalsecurity.org/military/world/brazil/sna.htm>>.

<sup>37</sup> 'Pakistan's 214 submarines made in Karach with German help', *Rupee News*, 26 Nov. 2008, <<http://rupeenews.com/2008/11/26/pakistans-214-submarines-made-in-karachi-with-german-help/>>.

<sup>38</sup> 'Submarine proliferation: India import behavior', *NTI*, Dec. 2008, <<http://www.nti.org/db/submarines/india/import.html>>.

<sup>39</sup> [To protect copyright], *Vedomosti*, 12 Dec. 2008.

<sup>40</sup> 'Russia, China resume talks on military transport planes', *RIA-Novosti*, 5 Sep. 2008, <<http://en.rian.ru/russia/20080905/116575606.html>>; and Johnson, R. F., 'Russian–Uzbek impasse threatens aircraft orders', *Jane's Defence Weekly*, 4 Feb. 2009.

This access has also been significant for the development of China's indigenous weapons and technology. Before 1990 Chinese weapons were generally outdated, often based on Soviet designs from the 1950s. With the help of imports China has managed in the past 15 years to partly close the technological gap, but it remains dependent on imports of weapons and especially of components and technologies. Some of these are imported as military technology, mainly from Russia, while other components and technologies are delivered as nominally civil imports.

In recent years China has presented a large number of new weapons that it claims to have developed. Many of these are dependent on Russian components, such as radars and engines that Russia is willing to deliver. However, many of the new 'Chinese' weapons closely resemble Russian systems, and it is unclear how much of the technology is legally imported from Russia and how much is copied without a licence.<sup>41</sup> One such weapon is the J-11B, a copy of the Russian Su-27 aircraft.<sup>42</sup> Chinese copying of Russian technology or complete systems has clearly angered Russia, not least because Chinese weapons compete for exports on the world market with Russian weapons, and Russia has reportedly threatened legal action.<sup>43</sup>

Although China and Russia have signed international agreements on intellectual property rights and underlined the importance of protecting such rights in the 2001 Treaty of Good-Neighbourliness and Friendly Cooperation, this does not seem to have deterred China from illegally copying military technology.<sup>44</sup> In December 2008 China and Russia signed an agreement on intellectual property rights for the arms trade.<sup>45</sup> While this may give Russia extra leverage to counter exports of Chinese weapons that include Russian technology, it will probably not stop China from copying Russian military technology. Russia therefore remains reluctant to sell its latest technology to China, although it needs the income from exports to maintain its arms industry and fund the development of new weapons.<sup>46</sup> Russia faces the problem of determining how to respond to Chinese requests for even more advanced Russian weapons when that seems to be

<sup>41</sup> La Franchi, P., 'Russia central to PLA modernisation', *Asia-Pacific Defence Reporter*, vol. 34, no. 3 (Apr. 2008). China has also been accused of illegally copying weapons and technology from other countries, such as South Africa. 'South Africa defense equipment copied by China', *India Defence*, 8 Jan. 2009.

<sup>42</sup> Minnick, W., 'Russia admits China illegally copied its fighter', *Defense News*, 13 Feb. 2009.

<sup>43</sup> 'Russia infuriated with Chinese export copies of Su-27 jet fighters', Pravda.ru, 22 Apr. 2008, <[http://english.pravda.ru/russia/economics/22-04-2008/104975-russia\\_china-0](http://english.pravda.ru/russia/economics/22-04-2008/104975-russia_china-0)>; and Bussert, J. C., 'China copies Russian ship technology for use and profit', *Signal*, June 2008.

<sup>44</sup> Treaty of Good-Neighbourliness and Friendly Cooperation between the Russian Federation and the People's Republic of China, signed and entered into force on 16 July 2001, <<http://www.fmprc.gov.cn/eng/wjdt/2649/t15771.htm>>.

<sup>45</sup> Abdullaev, N., 'Russia, China sign intellectual property agreement', *Defense News*, 15 Dec. 2008.

<sup>46</sup> Sieff, M., 'Russia's naval exports boom, especially in Asia', UPI.com, 15 Jan. 2009, <[http://www.upi.com/Security\\_Industry/2009/01/15/Russias\\_naval\\_exports\\_boom\\_especially\\_in\\_Asia/UPI-25231232030933/](http://www.upi.com/Security_Industry/2009/01/15/Russias_naval_exports_boom_especially_in_Asia/UPI-25231232030933/)>.

giving away Russian technology or compromising its position in relation to China.

China's options for acquiring weapons from abroad are limited. Israel, Switzerland and Ukraine have supplied China with some weapons and technology, and China's new Type-022 missile-armed, fast-attack craft is based on an Australian hull design exported to China as a civil fast ferry.<sup>47</sup> Despite the existing EU arms embargo on China, EU member states are significant providers of military and dual-use technology to China.<sup>48</sup> According to SIPRI data, between 1989 and 2008, 6.7 per cent of Chinese imports of major conventional weapons were from EU members; between 2004 and 2008 the proportion was 4.6 per cent. According to official EU financial data, in 2007 EU member states licensed military list items worth €209 million (\$400 million) for export to China and delivered at least €100 million (\$135 million) worth. For 2006 these figures were €292 million (\$365 million) and €134 million (\$170 million), respectively. A large part of these deliveries were aircraft and electronic equipment.<sup>49</sup> SIPRI has identified that equipment of European origin has been delivered or produced under licence in China, including French SAM systems and torpedoes and British, French and German engines.<sup>50</sup> China's helicopter programmes are almost entirely based on European designs, components or technology imported under what are claimed to be civil programmes. China and the EU have also developed close cooperation in civil space technology. This has given China access to rocket engines and, through its participation in the European Galileo system, satellite navigation technologies that also have clear military applications, such as for anti-satellite weapons, re-entry vehicles with nuclear warheads and precision-guided weapons.<sup>51</sup>

### *India*

India was the second largest importer for 2004–2008, with 7.2 per cent of global imports, and may become the largest market for arms exports in coming years. India plans to significantly increase its spending on arms procurement over the period 2009–2013 to spend 3 trillion rupees (\$70 bil-

<sup>47</sup> According to the Australian Defence Export Control Office the original civil design does not need an export licence. Roggeveen, S., 'Australia's role in China's naval expansion', *The Interpreter*, 31 Jan. 2008.

<sup>48</sup> On all multilateral arms embargoes in force in 2008 see appendix 12A in this volume.

<sup>49</sup> Council of the European Union, Ninth Annual Report according to Operative Provision 8 of the European Union Code of Conduct on Arms Exports, *Official Journal of the European Union*, C2530, 26 Oct. 2007; and Council of the European Union, Tenth Annual Report according to Operative Provision 8 of the European Union Code of Conduct on Arms Exports, *Official Journal of the European Union*, C300, 22 Nov. 2008.

<sup>50</sup> SIPRI Arms Transfers Database (note 1).

<sup>51</sup> Griffin, C. and Lin, J. E., 'China's space ambitions', *Armed Forces Journal*, Apr. 2008.

lion) on acquisitions for its armed forces.<sup>52</sup> While the Indian procurement process has been typified by constant delays and changing requirements, renewed tension with Pakistan after the November 2008 terrorist attack in Mumbai led to pressure within India to finalize decisions on major arms procurement plans.<sup>53</sup> It also led to an extra \$10 billion plan for 'homeland security' equipment for military and paramilitary forces to be purchased in 2009–11.<sup>54</sup> India's arms procurement and imports, including long-range strike aircraft, and extensive modernization of its navy are clearly directed as much against China as against the traditional enemy Pakistan.<sup>55</sup> In November 2008 the Indian External Affairs Minister, Pranab Mukherjee, referred to China as a security challenge to India.<sup>56</sup>

India has been a traditional customer of Soviet and Russian weapons, which have accounted for almost 75 per cent of India's import of major conventional weapons in the past 25 years. In 2008 India signed a \$1–1.2 billion deal with Russia for 80 Mi-17 helicopters.<sup>57</sup> Russia is actively offering India technology transfers and a cooperative development programme to replace more direct weapon sales.<sup>58</sup> An agreement in principle was signed in 2007 between India and Russia for joint development of a new combat aircraft, the PAKFA, an Indian version of which is planned for 2015 or 2016. India would have to pay some \$5 billion for the development phase alone, and there is still considerable doubt about the whole project.<sup>59</sup> A similar \$600 million joint venture for development of a transport aircraft (the MTA), agreed in 2002, ran into serious problems in 2008 when one of the Russian partners, Irkut, pulled out of the project.<sup>60</sup>

<sup>52</sup> Shukla, A., 'India unveils new arms procurement policy', Rediff News, 2 Aug. 2008, <<http://www.rediff.com/news/2008/aug/02arms.htm>>. The Indian Ministry of Defence plans to spend over 1.2 trillion rupees (\$20 billion) per year, double the amount spent annually in the past 10 years. Defense update, 'Defexpo 2008: India's arms procurement programs discussed at the bi-annual arms bazaar', Mar. 2008, <<http://www.defense-update.com/events/2008/summary/defexpo08.htm>>.

<sup>53</sup> The Indian Defence Minister, A. K. Anthony, claimed that the Indian military operates at less than 30% of the capability needed. Herman, S., 'India vows boost of defenses', Voice of America, 21 Jan. 2009, <<http://www.voanews.com/english/2009-01-21-voa15.cfm>>; 'Mumbai attack jolts defence ministry into action', *Times of India*, 18 Dec. 2008; and Pubby, M., 'Navy battles age, gaps in surveillance capability exposed in Mumbai attacks', *Indian Express*, 20 Dec. 2008.

<sup>54</sup> Raghuvanshi, V., 'India plans homeland security buys worth \$10b', *Defense News*, 31 Dec. 2008.

<sup>55</sup> Mathews, N., 'Modern times', *DTI*, Jan. 2009; and 'Interview with Air Chief Marshal F. H. Major', *Asian Defence Journal*, Dec. 2008.

<sup>56</sup> Stobdan, P., 'China's scary challenges to India', Institute for Defence Studies & Analyses Strategic Comments, 18 Nov. 2008, <<http://www.idsa.in/publications/stratcomments/PSStobdan181108.htm>>.

<sup>57</sup> 'India signs \$1.2b deal with Russia for 80 Mi-17 choppers', *Times of India*, 6 Dec. 2008.

<sup>58</sup> 'Press statements and replies to questions following Russian–Indian talks', President of Russia official web portal, Moscow, 5 Dec. 2008, <[http://www.kremlin.ru/eng/speeches/2008/12/05/1641\\_type82914type82915\\_210235.shtml](http://www.kremlin.ru/eng/speeches/2008/12/05/1641_type82914type82915_210235.shtml)>.

<sup>59</sup> 'Indo-Russian fifth generation fighter aircraft to fly by 2015', Domain-b.com, 8 Aug. 2008, <[http://www.domain-b.com/aero/mil\\_avi/mil\\_aircraft/20080808\\_sukhoi.html](http://www.domain-b.com/aero/mil_avi/mil_aircraft/20080808_sukhoi.html)>.

<sup>60</sup> 'Indo-Russian multi-role transport aircraft (MTA) JV heads for trouble as Irkut backs off', Domain-b.com, 17 Mar. 2008, <[http://www.domain-b.com/aero/mil\\_avi/mil\\_aircraft/20080317\\_aircraft.html](http://www.domain-b.com/aero/mil_avi/mil_aircraft/20080317_aircraft.html)>; and 'Russia's Irkut Corp stops financing MTA', *IndiaInfo.com*, 15 Mar. 2008, <<http://>

Russia has also offered India advanced technologies such as nuclear submarines. The possible lease or purchase of one or more nuclear submarines has been reported for years and was discussed during Russian President Medvedev's December 2008 visit to India.<sup>61</sup> However, Indo-Russian relations have been affected by quality problems with Russian weapons such as Krasnopol guided shells, delays in technology transfers for T-90 tanks and by major delays and demands for additional payments for the Su-30MKI combat aircraft and the aircraft carrier *Gorshkov*.<sup>62</sup> The price of the *Gorshkov* remains unresolved: a 'final' Russian offer of \$2.9 billion in February 2009 would bring the price to about that of a new ship.<sup>63</sup> India will probably accept the new price, but the problems have delayed other deals (e.g. for nuclear submarines) and this has damaged Indo-Russian relations.<sup>64</sup> Unlike China, India has the option to acquire weapons from other suppliers.

Indian-US relations have warmed considerably since 1998, when India conducted nuclear tests. India is now seen as an important ally and 'strategic partner', including against terrorism, and the Obama Administration has reconfirmed India's importance.<sup>65</sup> Since 2002 India and the USA have set up a number of mechanisms to discuss bilateral arms trade and other issues.<sup>66</sup> US companies landed their first large orders in late 2008: a \$600 million deal for six C-130J transport aircraft fitted with high-tech systems for use by special forces, and a \$2.1 billion deal for eight high-tech P-8 ASW aircraft.<sup>67</sup> The USA is actively marketing other weapons in India, including highly advanced weapons such as Patriot PAC-3 SAM systems and AEGIS naval combat systems.<sup>68</sup>

finance.indiainfo.com/2008/03/15/0803151047\_russias\_irkut\_corp\_stops\_financing\_mta\_joint\_production.html>.

<sup>61</sup> 'Press statements and replies to questions following Russian-Indian talks' (note 58). India's own much delayed ATV nuclear submarine is possibly based on Russian technology. 'The sub total', *India Today*, 21 Aug. 2008.

<sup>62</sup> On Krasnopol see *Indian Defence Yearbook 2008* (note 21), p. 172; on the Su-30MKI price increase see *Indian Defence Yearbook 2008* (note 21) pp. 164, 169-172; and on T-90 see 'India signs contracts for 80 MI-17 choppers with Russia', *India Defence*, <<http://www.india-defence.com/reports-4101>>; and 'India signs \$1.2b deal with Russia for 80 Mi-17 choppers' (note 57).

<sup>63</sup> Samanta, P. D., 'Russian want another \$700 mn for *Gorshkov*', *India Express*, 20 Feb. 2009. The new larger British carriers ordered in 2007 cost c. \$3-4 billion each. 'Go-ahead for £4bn aircraft carriers', *The Times*, 26 July 2007.

<sup>64</sup> 'India signs \$1.2b deal with Russia for 80 Mi-17 choppers' (note 57).

<sup>65</sup> 'India very important strategic partner: US', *The Hindu*, 13 Feb. 2009.

<sup>66</sup> 'Trust deepens for U.S.-India defense cooperation', Reuters, 16 Feb. 2008, <<http://www.reuters.com/article/pressRelease/idUS87925+16-Feb-2008+PRN20080216>>; 'India-US defence cooperation', Embassy of India in the USA, Washington, DC, <[http://www.indianembassy.org/new\\_site/indodefense.asp](http://www.indianembassy.org/new_site/indodefense.asp)>; and Saalman, L., 'The implications of the U.S.-India strategic partnership', *Power and Interest News Report*, 5 Aug. 2005, <[http://www.pinr.com/report.php?ac=view\\_report&report\\_id=341](http://www.pinr.com/report.php?ac=view_report&report_id=341)>.

<sup>67</sup> Pandit, R., 'US wants to be India's no. 1 partner in defence', *Times of India*, 11 Sep. 2008; and Boessenkool, A. and Raghuvanshi, V., 'India balks at C-130, P-8 restrictions', *Defence News*, 8 Feb. 2009.

<sup>68</sup> Boessenkool and Raghuvanshi (note 67).

However, two important barriers to increased arms imports from the USA remain. First, the USA demands for every sale an assurance that the weapons bought will be neither transferred to other foreign users nor used for purposes not agreed in the contracts without specific US permission. While most arms exporters make more or less the same demand, the USA also insists on the right to monitor end-use, including intrusive inspections on the territory of the buyer. India has until now refused to agree to such inspections, including for the two contracts signed in 2008.<sup>69</sup> The second barrier is Indian insistence on offsets, including for technology transfers and Indian production lines. This is not compatible with US Government policies or US corporate thinking, as witnessed by the disagreement over technology transfers for the F-35 combat aircraft between the USA and even its closest allies. Two US companies withdrew in 2008 from competitions for helicopters at least partly because the Indian demands for offsets would make any sale unprofitable.<sup>70</sup>

### **The impact of falling oil prices and the global financial crisis**

From early 2007 until the autumn of 2008 the price of oil increased by 300 per cent and then fell rapidly in late 2008 to the level of early 2007. This was followed by the more dramatic global financial crisis in late-2008.<sup>71</sup> Both upheavals are too recent to have had visible impact on arms deliveries in 2008, but repercussions for existing and future orders have begun to be evident. Several countries have rescheduled or suspended arms acquisitions or are discussing that option. This will have an impact on actual deliveries only after several years. The 1997 Asian financial crisis only had a clear impact on deliveries from 1999 (see figure 7.1). However, because most procurement programmes include payments when an ordered weapon is under production, there can be immediate financial benefits for buyers from cancellations or delays.

Few officials have yet commented on the impact of the crisis on the arms trade. Russia's Deputy Prime Minister, Sergei Ivanov, claimed in December 2008 that the financial crisis had not yet led to a decline in arms sales and that none of Russia's clients had show any sign of changing or cancelling contracts. However, Ivanov noted that several Russian arms producers had been hard hit by a 'cash flow problem': finding funds to cover producers' costs until buyers pay for delivered products had become problematic.<sup>72</sup>

<sup>69</sup> While the contracts have been signed, delivery can only take place after the US Government allows it and would be on the condition of an end-use monitoring agreement. Boessenkool and Raghuvanshi (note 67).

<sup>70</sup> Nelson, C., 'Bell hits helicopter landmark in India', *IndUS Business Journal*, 15 Dec. 2008.

<sup>71</sup> See also chapter 6, section II, in this volume.

<sup>72</sup> 'Global crisis hits Russian arms makers', Reuters, 11 Nov. 2008, <<http://www.reuters.com/article/rbssBanks/idUSLB11929320081111>>.

Similar difficulties can be expected in other countries. In addition, finding long-term credit lines for arms acquisitions is bound to become a problem. The Russian Government, for example, has urged Russian banks to offer credit on favourable terms to Russian arms-exporting enterprises.<sup>73</sup>

To mitigate the effects of the financial crisis many countries have spent significant funds to support their economies, limiting the financial resources available for defence. Malaysia suspended a 1.7 billion ringgits (\$475 million) order for French helicopters in order to save money, even though new helicopters are badly needed to replace older ones that are no longer considered safe.<sup>74</sup> Italy decided to delay acquisition from the USA of the F-35 combat aircraft, and the UK is reported to also be considering that option.<sup>75</sup> In 1997 the reaction to the financial crisis was in most cases not outright cancellation of procurement, but rather temporary suspensions. However, the UK may not just delay but even cut part of the F-35 programme, possibly by up to 40 per cent, a saving of \$4.5–5.8 billion on acquisition costs.<sup>76</sup>

The financial crisis also has other implications. For the USA and other suppliers that trade in US dollars the significant appreciation of the dollar against many other currencies, often by more than 25 per cent, makes the weapons more expensive. Importers that receive a large part of their income in dollars will not have a problem because of changes in exchange rates. Many oil-producing countries, particular in the Middle East, are also not negatively affected by the dollar appreciation; their dollars from oil sales may enable them to buy more weapons from non-dollar countries.

The increased oil prices gave an advantage for major oil exporting states in funding their arms purchases. Algeria, Saudi Arabia and the UAE are among the countries that suddenly have sufficient funds to embark on extensive arms acquisitions. While reduced income will eventually lead to reduced spending by oil-exporting countries, the accumulated income from oil exports has given the Gulf countries the financial opportunity to place large orders even in 2009.<sup>77</sup>

<sup>73</sup> 'Global crisis hits Russian arms makers' (note 72); and 'Russian banks have sufficient liquidity—Shvalov—2', RIA-Novosti, 2 Nov. 2008, <<http://en.rian.ru/russia/20081102/118101522.html>>.

<sup>74</sup> Khoo, G. S., 'Eurocopter deal suspended', *The Sun* (Kuala Lumpur), 28 Oct. 2008.

<sup>75</sup> Ripley, T., 'Funding may delay UK's first JSF purchase', *Jane's Defence Weekly*, 4 Nov. 2008.

<sup>76</sup> Caffrey, C., 'Analysis: reducing F-35 purchase could save UK up to USD5.8bn', *Jane's Defence Industry*, 31 Oct. 2008. Other major British programmes were postponed to free funds to pay for operations and equipment in Afghanistan. British Ministry of Defence, 'Defence equipment', 11 Dec. 2008, <<http://nds.coi.gov.uk/imagelibrary/downloadMedia.asp?MediaDetailsID=260218>>.

<sup>77</sup> Kawach, N., 'Defence spend increases despite slump', *Emirates Business* 24/7, 27 Feb. 2009, <[http://business24-7.ae/articles/2009/2/pages/02272009\\_a012bd3838e84f85ab39c8c9ab5fdb85.aspx](http://business24-7.ae/articles/2009/2/pages/02272009_a012bd3838e84f85ab39c8c9ab5fdb85.aspx)>; 'UAE defence spending spree hits 4.6 billion dollars', *Agence France-Presse*, 25 Feb. 2009, <[http://www.blnz.com/news/2009/02/25/defence\\_spending\\_spree\\_hits\\_billion\\_3294.html](http://www.blnz.com/news/2009/02/25/defence_spending_spree_hits_billion_3294.html)>; and Berrigan, F., 'There might be a financial crisis, but the world's arms dealers are doing just fine', *AlterNet*, 30 Sep. 2008, <[http://www.alternet.org/workplace/100801/there\\_might\\_be\\_a\\_financial\\_crisis\\_but\\_the\\_world's\\_arms\\_dealers\\_are\\_doing\\_just\\_fine/?page=entire](http://www.alternet.org/workplace/100801/there_might_be_a_financial_crisis_but_the_world's_arms_dealers_are_doing_just_fine/?page=entire)>.



The global financial crisis could lead to an increased willingness to export in order to protect the trade balance or the arms industry by allowing sales to countries or on conditions that were not readily accepted before the crisis. For example, with the Russian economy especially hard hit by both the fall in oil prices and the effects of the financial crisis, the option of earning more from arms exports by being less restrictive in sales to China or Iran may find favour in Russia.<sup>78</sup> A similar argument can be made for other countries.

### III. Arms transfers and war: Sri Lanka and the Tamil Tigers

In January 2008 the Sri Lankan Government abandoned peace negotiations and a truce with the Liberation Tigers of Tamil Eelam (LTTE or Tamil Tigers) to pursue a military victory over the LTTE.<sup>79</sup> The manner in which the Sri Lankan Government and the LTTE acquired weapons underlines how small volumes of weapons can have a significant negative effect. Sri Lanka accounted for just 0.2 per cent of imports of major conventional weapons in the period 2004–2008, and the reported financial value of its arms imports is also low. However, with almost 8400 killed—as many as in Afghanistan and Iraq combined—the conflict in Sri Lanka had the highest number of battle-related deaths in 2008.<sup>80</sup>

The LTTE has demanded an independent Tamil state in the north and east of Sri Lanka and has fought the government since 1983. A formal ceasefire was agreed and peace talks began in February 2002, but 60 000 people had been killed and the economy ruined by the conflict. A resurgence of violence began in late 2005, and on 2 January 2008 the Sri Lanka Government officially abandoned the ceasefire. While formally keeping the door open for peace negotiations, the government openly opted for a military solution of total victory over the LTTE, which it hoped to achieve by the end of 2008.<sup>81</sup> By February 2009 the LTTE had suffered serious losses and the last areas under its control were on the verge of

<sup>78</sup> Sestanovich, S., 'Russia and the global economic crisis', Council on Foreign Relations Expert Brief, 25 Nov. 2008, <<http://www.cfr.org/publication/17844/>>; and McDermott, R., 'Russia feels pinch over arms plans', *Asia Times*, 16 Jan. 2009.

<sup>79</sup> On the conflict in Sri Lanka see chapter 2, section IV, in this volume.

<sup>80</sup> See appendix 2A in this volume.

<sup>81</sup> Sri Lankan Ministry of Foreign Affairs, Statement by Hon. Rohitha Bogollagama, Minister of Foreign Affairs, Colombo, 4 Jan. 2008, <<http://www.peaceinsrilanka.org/peace2005/Insidepage/PressRelease/WebRel/January/WebRel040108.asp>>; 'Sri Lanka: war far from over', ISN, 9 Sep. 2008, <<http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?lng=en&id=91166>>; 'Q&A: Sri Lanka crisis', BBC News, 26 Nov. 2008, <<http://news.bbc.co.uk/2/2405347.stm>>; and 'Army "takes more Tiger territory"', BBC News, 8 Jan. 2009, <<http://news.bbc.co.uk/2/7817110.stm>>.

being overrun. However, the LTTE remains committed to an independent Tamil state and is likely to continue guerrilla warfare.<sup>82</sup>

### Arms supplies to the Sri Lankan Government

The decision to aim for military victory over the LTTE must at least partly be attributed to a belief by the Sri Lankan Government and military that their forces were strong enough to defeat the LTTE. During past government offensives the LTTE had proven to be a strong opponent with a considerable ability to smuggle in weapons. However, between 2000 and 2007 Sri Lanka acquired several larger warships from India, Israel and the USA to use against LTTE arms smugglers. By October 2007 the government had succeeded in wiping out the LTTE's fleet of seagoing cargo ships.<sup>83</sup> It also acquired more and better small patrol boats, some significant advanced surveillance systems in the form of unmanned aerial vehicles (UAVs) from Israel, a ground surveillance aircraft from the USA and radars from India and the USA. With these Sri Lanka was able to establish an inshore blockade of LTTE-held territory and stop arms smuggling by small LTTE craft. Sri Lanka also acquired some new weapons for its expanding force, including combat aircraft from China, Israel and Ukraine. More importantly, it prepared for the new war by importing extensive stocks of ammunition and ensuring that more supplies, many from China and Pakistan, were readily available.<sup>84</sup> Between mid-2002 and mid-2007 Sri Lanka received at least \$140 million worth of military equipment from China. A large part of this was probably for ammunition stockpiles, but it is also likely to have included small arms for the expanded Sri Lankan forces.<sup>85</sup> Supplies imported from Pakistan in 2000–2007 were worth at least \$50 million, but the amount may have been as high as \$50 million per year. These acquisitions were supported by Pakistani Government credits and increased in the second half of 2007.<sup>86</sup> In early 2008 a new deal was agreed

<sup>82</sup> Moss, T., 'Sri Lankan army captures final LTTE stronghold', *Jane's Defence Weekly*, 4 Feb. 2009, p. 4; and Lawson, A., 'Is the end near for Sri Lanka's rebels?', BBC News, 9 Jan. 2009, <<http://news.bbc.co.uk/2/7820188.stm>>.

<sup>83</sup> 'Varaha sees action', *The Nation* (Colombo), 14 Oct. 2007.

<sup>84</sup> Sri Lanka's military budget has grown rapidly in recent years to pay for increases in personnel and additional equipment and for the cost of operations. See chapter 5 in this volume.

<sup>85</sup> Since 1993 the Chinese company NORINCO has operated a warehouse in Sri Lanka from which it can supply weapons on short notice. Sri Lanka was reportedly \$60 million behind in payments to NORINCO in mid-2002. By mid-2007, when Sri Lanka replaced its agreement with NORINCO with an agreement with its Chinese competitor Poly Technologies, this debt had increased to \$200 million. Athas, I., 'Sri Lanka may lose Chinese weapons arrangement', *Jane's Defence Weekly*, 15 Jan. 2003; and 'Sri Lanka and the Chinese warehouse', Strategy Page, 2 June 2007, <<http://www.strategypage.com/htm/htproc/articles/20070602.aspx>>.

<sup>86</sup> There is significant confusion about the level of Pakistani supplies prior to 2008. A Pakistani newspaper reported the value as \$50 million as of Dec. 2007. 'Lanka orders emergency Pak military supplies', *Daily Times*, 4 Apr. 2008. Another report claims that the annual value increased in Dec.

for 150 000 60-millimetre mortar shells and 150 000 hand grenades from Pakistan, which were immediately delivered from Pakistani army stocks. A \$25 million deal for artillery and mortar shells for delivery within 1 month was also agreed.<sup>87</sup> The acquired stocks and the willingness of Pakistan to deliver more ammunition on very short notice must be a major explanation of why the Sri Lankan offensive managed to go on for the whole of 2008.

Sri Lanka approached India for weapons several times but, despite having declared the LTTE a 'terrorist' group in 1993, India maintained that a military solution to the conflict was not the right approach and stated that it would not supply deadly or offensive weapons to Sri Lanka.<sup>88</sup> However, the increase in Pakistani arms supplies led to discussion in India of Indian 'pre-eminence' in South Asia, and in late-2007 India offered to sell weapons to the Sri Lanka Government in reaction to Chinese and especially Pakistani sales.<sup>89</sup> India offered Sri Lanka a \$100 million loan to buy Indian equipment, including vehicles and air defence systems, although the non-deadly or non-offensive clause remained.<sup>90</sup>

In 1997 the USA declared the LTTE a terrorist organization and the EU followed suit in 2006, but both were generally hesitant to supply weapons to Sri Lanka. Although Sri Lanka attempted to buy weapons from the USA and several EU countries, most such exports were denied, mainly because the USA and the EU maintained that military action was not the solution to the conflict and because there were serious concerns about human rights abuses by Sri Lankan Government forces.<sup>91</sup> However, as noted above, some non-deadly systems supplied by the USA had a major impact on the war.

2007 to \$80 million. 'Military aid: US out, enter Russia', Associated Press, 23 Dec. 2007, <<http://www.lankanewspapers.com/news/2007/12/22918.html>>.

<sup>87</sup> 'Lanka orders emergency Pak military supplies' (note 86).

<sup>88</sup> The Indian Government also had to take into account that there was strong support for the LTTE among the large Tamil population in southern India. 'Lanka orders emergency Pak military supplies' (note 86).

<sup>89</sup> 'India worried by Sri Lanka arms buying', *Thaindian News*, 26 Mar. 2008, <[http://www.thaindian.com/newsportal/south-asia/india-worried-by-sri-lanka-arms-buying\\_10031569.html](http://www.thaindian.com/newsportal/south-asia/india-worried-by-sri-lanka-arms-buying_10031569.html)>. Rivalry among India, China and Pakistan has in recent years also been a reason for Indian arms supplies to Myanmar and Nepal.

<sup>90</sup> 'Lanka orders emergency Pak military supplies' (note 86); Samantha, P. D., 'Surge in Pak arms sales to Sri Lanka worries India', *Indian Express*, 10 May 2008; and 'Military aid: US out, enter Russia' (note 86). The non-deadly or non-offensive clause is probably somewhat flexible. Indian ships delivered to Sri Lanka were armed and have been used in shooting incidents. A similar Indian-Pakistani competition to gain the favour of the Sri Lankan Government occurred in 1971, when both countries supplied aid to another Sri Lankan rebel group.

<sup>91</sup> The EU, however, has no common policy on arms exports to Sri Lanka. E.g. while the UK in 2007 denied several exports of weapons, Slovakia delivered 10 000 artillery rockets in early-2008. British Foreign and Commonwealth Office and British Ministry of Defence, *United Kingdom Strategic Export Controls Annual Report 2007*, Cm 7451 (Office of Public Sector Information: Kew, July 2008), p. 20; and 'Attack on arms sale to Sri Lanka', BBC News, 10 Apr. 2008, <<http://news.bbc.co.uk/1/7339423.stm>>.

### Arms supplies to the Tamil Tigers

The LTTE has developed from a poorly-armed guerrilla army, using mainly small arms and improvised mines, to a conventional force holding territory and armed with heavy weapons. Like any rebel organization, the LTTE has acquired many of its weapons through capture or theft from government armed forces or police. However, there is extensive documentation of LTTE arms acquisitions abroad and of these weapons being smuggled to LTTE-held territory. Understandably, these acquisitions are not easy to quantify. The Sri Lankan Army reported that by May 2009 it had captured a staggering 100 000 small arms from the LTTE.<sup>92</sup>

Most of the facts on LTTE arms acquisitions are gleaned from information about deliveries that did not make it to LTTE-held territory. However, it remains unclear how the type, volume and source of weapons seized while being smuggled to Sri Lanka, or of weapons the LTTE has attempted to acquire, relate to the overall picture of LTTE arms acquisitions.

The LTTE has been unsuccessful in gaining military aid or even political support from states. While it has established some arms-producing capability, including light mortars and mortar shells, it appears that most LTTE arms are acquired illegally on the black market. Possibly unique among rebel forces, the LTTE has developed an extensive organization for financing, buying and smuggling weapons that is controlled completely by the LTTE itself.<sup>93</sup> The LTTE has owned seagoing ships that have mostly been used for commercial purposes but from time to time to smuggle weapons for the LTTE.

The main sources of supply for the LTTE have generally been in South East Asia. Not only is this region close to Sri Lanka and rife with places where weapons can easily be bought from unscrupulous dealers or corrupt officials, but it is also a region where many Tamils live and work, providing a fertile recruiting ground for the LTTE network of arms buyers and smugglers. Thailand, in particular, has been mentioned as a source and transit point for arms. Several shipments of small arms and light weapons have been intercepted on ships that sailed from Thai harbours, but at least some of the weapons appear to come from other, probably South East Asian, countries. Such weapons include reported deliveries in or just before 2000 of 130-mm guns from Cambodian Government inventories or the Khmer

<sup>92</sup> This included many Chinese Type-56 rifles that are also used by Sri Lankan forces and thus may have been captured by the LTTE. Bell, S., '\$20M in Tiger weapons seized', *National Post*, 5 May 2009.

<sup>93</sup> Balachandran, P. K., 'Lanka most militarized in South Asia: study', *Hindustan Times*, 21 Sep. 2006.

Rouge rebels.<sup>94</sup> LTTE connections with arms dealers in Indonesia and Myanmar have also been reported.<sup>95</sup>

Africa and, to a lesser extent, Eastern Europe have been cited as sources of LTTE weapons.<sup>96</sup> In 2006 the US Federal Bureau of Investigation twice detected that the LTTE was trying to buy weapons in the USA or from US-based brokers, including up to 100 Igla man-portable air defence systems (MANPADS). Since the Igla is not produced or in service in the USA, they must have come from non-US sources.<sup>97</sup> Sri Lankan officials named Eritrea as the source of a large consignment of weapons that was sold by China to the Eritrean armed forces and then, subsequently, illegally resold in 2007 by Eritrean officers to the LTTE.<sup>98</sup> A US Senate report claimed that the Eritrean Government 'reportedly' provided military aid to the LTTE.<sup>99</sup>

There was little evidence of LTTE arms acquisitions in 2008. The loss of smuggling ships and the tight naval blockade seem to have stopped most arms trafficking, although there are indications that some weapons probably made their way to the LTTE.<sup>100</sup>

#### IV. Conclusions

The yearly upward trend in the five-year average of arms transfers since 2005 continued in 2008. The main exporters were the USA and Russia. These two together with Germany, France and the UK accounted for 79 per cent of all exports in 2004–2008. China remained by far the largest importer for 2004–2008, followed by India, the United Arab Emirates, South Korea and Greece. Europe, East Asia and the Middle East each accounted for 20–21 per cent of all imports, while South Asia accounted for 10 per cent.

It is too early to discern a major impact from the global financial crisis that erupted in late-2008 and from the fall in oil prices, but it is clear that

<sup>94</sup> The guns were first reported in use in early 2000. Brooke, M., 'Where artillery is king', *Armed Forces Journal*, July 2000, pp. 18–19.

<sup>95</sup> Davis, A., 'Tamil Tiger arms intercepted', *Jane's Intelligence Review*, Feb. 2004; and LRRP, 'Has LTTE resumed arms smuggling', 1 Mar. 2008, <<http://lrrp.wordpress.com/2008/03/01/has-ltte-resumed-arms-smuggling>>.

<sup>96</sup> A former high-ranking LTTE official claimed that a Ukrainian 'weapons baron' delivered weapons, including artillery to the LTTE. 'A retard with amnesia speaks out: but is it fact or fiction?', *Lankanewspapers.com*, 24 Jan. 2009, <[http://www.lankanewspapers.com/news/2009/1/38226\\_space.html](http://www.lankanewspapers.com/news/2009/1/38226_space.html)>.

<sup>97</sup> Terhune, L., 'FBI sting operation nets suspects in Sri Lanka arms trafficking', *America.gov*, 22 Aug. 2006, <<http://www.america.gov/st/washfile-english/2006/August/20060822170008mlenuhret0.4714319.html>>; and Madigan, N. 'Indonesian general sentenced for his role in Sri Lanka arms plot', *Baltimore Sun*, 11 July 2008.

<sup>98</sup> LRRP (note 95).

<sup>99</sup> US Senate, 'Embassies as command posts in the anti-terror campaign', *Committee on Foreign Relations*, 15 Dec. 2006, <[http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109\\_cong\\_senate\\_committee\\_prints&docid=f:31324.wais](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_senate_committee_prints&docid=f:31324.wais)>.

<sup>100</sup> LRRP (note 95).

the crisis will limit the resources available for arms acquisitions. Some countries have already suspended or delayed procurement. However, Russia and the USA, as well as the main European suppliers, have extensive backlogs for orders. The USA order backlogs are the biggest reported for many years.

China's imports, which come mainly from Russia, have strongly decreased in the past two years and large new orders have not been placed. China is integrating or copying imported Russian technology in Chinese-designed weapons, which angers Russia. India, on the other hand, is perceived as a growing market. Russia is still the main supplier of weapons to India, but it faces fierce competition from European countries, Israel and the USA.

The war in Sri Lanka demonstrates how even small deliveries of weapons and ammunition can have a major impact. While Sri Lanka imports on a global or even regional scale were negligible, they were enough to make the government confident that it could abandon an internationally brokered process for peace negotiations and opt instead for a military solution.