

The Rise of the Modern Arms Black Market and the Fall of Supply-Side Control¹

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Four decades after the Second World War, a world divided between antagonistic nuclear superpowers seemed largely at peace. To be sure, there were flare-ups — civil wars, insurrections and border clashes — some of them highly destructive of life and property. But each one seemed exceptional in cause, remarkable in effect and, in the minds of the citizens of the major powers, relegated to faraway places.

Today, by contrast, the entire globe, from Albania to Zaire, from South Africa to North Ossetia, from Eastern Slavonia to the West Bank, seems wracked by political violence. These conflicts cannot be written off as merely ‘internal’ feuds and therefore the business, apart from outside ‘humanitarian’ hand-wringing, of only the people directly involved. Their number and scale affect the world at large and each apparently intra-state conflict, by calling into question the position of ethno-sectarian minorities, has the potential to precipitate inter-state clashes as well.

Behind the Bloodbath

In retrospect much of the peace of earlier decades was precarious, with the underlying tensions held in check by a number of constraints. One, to be sure, was the very Cold War alliance system which not only set limits to the autonomy of those under its thrall, therefore limiting inter-state conflict, but also provided many states with a reason for existence, helping to reduce the potential for civil strife.²

That was reinforced by an ideological factor. Both sides preached their own version of universal humanism, creeds that at least on the surface transcended race and colour. At the same time ‘developing’ countries could offer to their multi-ethnic populations the prospect that the state could be an agent above tribe, clan or sect, to promote economic progress and integrate them equally into civil society.

Added to this was the illusion of the boundlessness of nature, once harnessed by productive capital and human ingenuity, and therefore of the

seemingly limitless possibilities for economic growth. As long as everyone's living standard was rising it mattered little if a favoured few, within and between countries, saw theirs rising very much faster.

All that is now gone or rapidly disappearing. Stripped of Cold War rationale, many states have also lost whatever legitimacy they once possessed. Meantime, without Cold War restraints, their arsenals have become both a prize and a means of social strife. Nowhere was this more graphically illustrated than in the former Yugoslavia, propped up by both sides as a buffer and an ideological way-station, and essentially abandoned to its own fratricidal devices once its usefulness was at an end.

Now the ideologies, too, are quite different. Racism seems rampant in much of the West. Emerging countries attempt to unify populations and paper over serious problems by focusing on ethno-religious solidarity. And in all too many 'developing countries', as the old-colonially imposed borders cease to be accorded whatever limited legitimacy they once had, the notion of civil society is being rapidly replaced by a more primordial form of group identification. As a result, in country after country, minorities are being targeted for harassment, expulsion or extermination, particularly if they happen to be squatting on territory, physical or metaphysical, which another clan, sect or tribe happens to regard as its birthright.

There is much more at stake in this process of ethno-sectarian consolidation than merely determining who will control the resting sites of ancestral bones. And its causes lie much deeper than simply the perversity of human nature.

It is true that some of these conflicts have been festering on their own for generations, with their origins lost to all but archeologists. Others are the belated reaction to the territorial and social carve-ups imposed by the European colonial powers. Yet others were created or greatly exacerbated by the protagonists in the Cold War as a means of making trouble for allies of the other side. But many are largely attributable to contemporary conditions.

The most important of these conditions is the fact that with an ever increasing pressure on physical resources that are not merely limited, but in

many cases rapidly depleting, with an ever worsening distribution of material wealth and ecological capital, ethnic and sectarian feuds are often surrogates for disputes over land and water, fish and forests, minerals and energy.³

It is true that contests over control of natural wealth have an ancient pedigree. Before the birth of modern agriculture in the eighteenth century, much of human history could be written around a cycle of one society slashing down forests, draining the water supply, depleting the most accessible minerals and exhausting the soil to such an extent that it had to pick up and colonise or conquer another area.⁴ What is different today is that the process is virtually global in scope; the rate is accelerating, and it is occurring in societies where both numbers and expectations are unsustainably high. And that exacerbates the third major change which has taken place.

Once it was generally accepted that economic growth made social justice financially possible and morally essential. But today, economic performance and distributive justice have little in common. In many of the rich countries, as stock markets soar to dizzy heights, unemployment rates seem permanently stuck at double-digit levels while the social safety net is being torn full of holes. It has become less a matter of creating new wealth than of conniving and quarrelling over what does exist.

While certainly present before the end of the Cold War, the apparent triumph of 'free-market' liberalism made these trends all the stronger. Traditional forms of protectionism, economic and social, have disappeared from many sectors in the face of freer international movement of commodities, services and ideas, while fiscal restraints have made it all the more difficult to mitigate the effects. With populations robbed of social and economic security of the type the state was supposed to (though too often did not) provide, tribe, sect, clan and extended family are called upon to perform more and more of the functions previously assigned to the civic order. Inevitably loyalties get transferred, and those social units can all the more easily become the medium through which to express political frustrations in violent form.

Furthermore, lacking the more limited ideological and political objectives of the Cold War era, armed clashes, by virtue of being more protracted, tend

to take on a special, self-sustaining dynamic of their own. Once conflict has lasted for a sufficient length of time to wreck the civil economy, through physical destruction, collapse of domestic purchasing power and capital flight, it sets the stage for its own perpetuation, not least by the creation of a generation whose only skills, at what should be their peak productive years, are military and who therefore turn easily to criminal activity for survival.

Thus, the distinction between crime and politics across great swathes of territory becomes murky. Warlords replenish their treasuries by theft, extortion and contraband traffic; while criminals carve out political fiefdoms on the rationalisation, not necessarily incorrect, that in an increasingly stingy environment they can provide for their own at least as well, if not better, than the corrupt or incompetent leaders of the previous regime.⁵

This volatile combination of a breakdown in the old oligopoly of power, the resurrection of ethno-religious identification in place of membership in a civil society, and the triumph of savage capitalism with its increasing disparities in the distribution of income, wealth and ecological capital goes far to explain the present-day epidemic of political violence. Yet it does not go quite far enough. There is another reason for much of the current carnage, namely the triumph of a 'free market' in the instruments for effecting political and social change by violent means.

This, too, represents a dramatic change. For, in the past, conflicts were self-limiting, not just because they took place within a better defined geo-strategic context with much clearer ideological and political objectives, but also because the major powers could adjust the temperature more or less at will through access to the tools of the trade. Historically the control mechanisms were of two sorts. On the supply side of the arms market, there was the ability of the major powers to influence, even sometimes control, the movement of weapons, ammunition and spare parts around the world. On the demand side, the ability of non-state actors to get even those weapons that escaped such political control was limited by their capacity to obtain the means of payment. Today, neither of those constraints seems operational. Weapons are easily available to all who have the ability to pay, and the global explosion of illicit activity has put the means of payment

within the grasp of a remarkably diverse set of insurgent groups, paramilitary forces, militant religious sects and unabashed bandit gangs.

The Disintegration of Supply-Side Control

This was not always so. Typically in the past, after each major war, arms production fell sharply as those firms which could do so, reverted or converted to civilian production. Thus, the flow of new weapons was drastically diminished, and eventually the stock of second-hand material wore down. The irony today is that for the first time in history there exists a fairly extensive international agreement on methods to control arms transfers. Yet never before has (conventional) arms proliferation been such a threat.

Until well into this century, arms were like any other commodity, freely traded except during wars, when one side would attempt to limit supplies to the other. Then, in the wake of the First World War, there emerged a popular consensus that the main responsibility for the carnage lay with the 'merchants of death', a cabal of arms manufacturers in league with weapons salesmen who secretly contrived crises and instigated conflicts to sell their merchandise.⁶ That kind of thinking led to the first effort to impose visibility on arms transfers, a League of Nations-run international registry, as well as to national initiatives in the form of supply-side restrictions. In 1933 Belgium took the lead in imposing on its arms industry the requirement of a state-issued export license. It was an example virtually all countries would follow in decades to come.⁷

In the years following the Second World War there actually seemed some chance that arms transfers could be sharply limited, if not totally controlled. Over time countries came to agree that the business of arms manufacturing, where not already state-owned, would be state-regulated, and that they (China remains the one big exception) would issue no export licenses unless the would-be purchaser produced an 'end-user certificate' — essentially a pledge by relevant officials in the purchasing country that the arms were intended solely for the use of that country's military forces and would not be transferred to third-parties without permission of the country of origin. At the same time the world weapons trade was dominated by the United

States and the Soviet Union who produced top-of-the-line equipment for their own forces and for their immediate allies, and gave away or transferred on the basis of soft credits, second-hand material to their Third World satellites. Even when the two superpowers came to face serious competition, it was initially from producers in Europe over whom the United States and Soviet Union could exercise a restraining hand.

The result was that, for several decades after the war, there was little evidence that a free-wheeling world arms market could complicate the search for a lasting peace. While it was generally accepted that transfers of light weapons were going to be difficult to really restrict, the sector dealing with major weapons systems, which were viewed as the really lethal stuff, was subject to a double political control — by the NATO-Warsaw Pact alliance system and by the virtual universalisation of the end-user certificate. To be sure, there were problems which came to the fore during the Nigerian Civil War, the first one in history in which Africans fought each other with modern weapons. During that conflict gun-runners learned or honed many of the tricks that would subsequently become standard. They used third country diversions, false and misleading end-user certificates, multiple layers of intermediation and the trick of purchasing demilitarised planes that could be quickly and cheaply recommissioned. During that war, too, it became clear that governments were prepared to accommodate these tricks when it served their interests. Portugal, to weaken the moral position of the liberation movements in its colonies, hosted the main rebel buying mission, and permitted gun-running planes with obviously false registrations to refuel in Lisbon and the African colonies. Meantime France, to undermine Britain's position in West Africa, connected the insurgents with French intelligence-approved arms salesmen.⁸

However, even if such covert dealings in heavy equipment, like aircraft, warships, major artillery pieces, tanks and the like existed from time to time, they were assumed to be minor in scale, infrequent, and susceptible of being stopped by tighter domestic enforcement and better international co-operation.

Furthermore, it appeared there was little cause for concern even with regards to that sector of the arms market where formal controls seemed impossible to enforce, the part dealing with 'light' weapons. Certainly at the end of World War II there were masses of firearms, light machine-guns,

hand-held rocket launchers and similar material in the territories of the former belligerent powers and scattered across war-zones. However, not only were these weapons not taken very seriously, there actually were controls of a more informal nature that seemed, initially at least, quite effective.

During the 1950s the United States supported the efforts of a former Central Intelligence Agency (CIA) officer, Sam Cummings, to stockpile as much of the world's surplus as possible — so much so that at peak he could boast that he could equip forty infantry divisions out of his warehouses. Backed by ample bank credit, Cummings could move quickly to take material off the open market and prevent it from falling into unwanted hands. He could act as a cutout whenever the United States (or Britain) decided secretly to violate an international arms embargo to which they nominally adhered. And, not least, he had built up an inventory of 'sterile' weapons of all types and makes, including ample amounts of East Bloc equipment that the CIA could call on when required to equip guerrilla or insurgent forces fighting against regimes backed by the Soviet Union. What made the arrangements especially useful was that Cummings never supplied a belligerent force without a nod from Washington.⁹

In the 1960s numerous wars of decolonisation in Africa had brought free-lancers into the arms supply trade. Still, none yet could challenge Sam Cummings. Most of them were brokers rather than merchants, and therefore could not guarantee customer satisfaction with the same degree of reliability. They were hobbled by the traditional limitations of the black market which could not assure regularity of supply. Moreover, given the expenses associated with smuggling goods, laundering money and paying off officials, prices on the black market tended to be higher.

This happy combination of a duopoly (and later an oligopoly) in the production of heavy weapons and a controlled 'black market' in light arms worked well for a time. With world production accelerating in the 1970s, it began to disintegrate, especially in the light weapons business. Then, in the 1980s, it collapsed completely — because of changes on both sides of the market equation.

On the supply side, three factors were at work. The first was the fact that the old pattern of supplier states winding down arms production after each

major conflict had been abandoned after World War II. The United States and the Soviet Union, followed by most other major industrial countries, in addition to not a few minor ones, made a commitment to keeping arms production at wartime levels.¹⁰ Indeed, even the end of the Cold War has done remarkably little to reverse that trend.

There are many reasons for a country to maintain, or to build, its own arms industry. One is geo-strategic: a domestic arms producing capacity might be seen to be essential to assure independence and/or influence in international relations. Another could be technological: weapons manufacturing was viewed as the leading edge in a process of learning-by-doing with spin-offs into the civilian sector, something especially important for developing countries intent on modernisation. Yet another is economic: the arms industry might be considered an important and irreplaceable source of jobs and economic growth, precisely the belief that led to the entrenchment of the Permanent War Economy in the United States.¹¹

This enormous expansion of productive capacity meant that the output of arms was far more than could be absorbed in the arsenals of the producing countries' own armed forces. The result was that the old pattern of controlled gifts or soft-credit sales by the major powers was replaced by an international sales drive. Producing countries of all shapes, sizes and ideological predilections were motivated by the desire to promote arms exports as a means of earning foreign exchange. In addition, it was frequently argued that exports and domestic military preparedness had to go together — exports permitted countries to acquire their own arsenals at a lower unit cost.¹² That new propensity to seek export markets was enhanced by the fact that as each new generation of weapons appears, it calls for the disposal of the previous one. Particularly in times of budgetary crisis, the obvious way to dispose of them is by sales abroad.

As time went on, the geo-strategic reasons for maintaining a domestic arms producing capacity became less and less important in comparison to strictly financial ones, with the result that, today, the arms business has been almost completely commercialised just at the point in history when it is capable of doing the greatest damage.¹³ This is a change of the utmost significance. With the manufacture of weapons being seen as so important to the economic well-being of so many countries, the rule has become not to

employ economic resources to make what is necessary for military requirements, something which has logistical limits. Rather it is the reverse — military production, and foreign sales, take place all too often to meet the profit needs of the producers, and the employment and foreign exchange needs of the host country, things for which a country's demand is virtually unlimited. Under these circumstances, an exporting country will almost inevitably subject its customer list to considerably less scrutiny than was the case when the main purpose of arms transfers was to enhance the producing country's international power and prestige.

By the 1980s the system of export licensing based on end-user certificates had become a farce. These certificates could almost be assigned stars, much like restaurants in the *Guide Michelin*. A one-star certificate might be a pale imitation of a Bolivian or Nigerian one, obtained from a shady office in Brussels or Geneva — it would cost very little, though it might present serious risks of detection. A two-star certificate might be real, issued by a corrupted military attaché of an embassy — since it was better, the price was accordingly higher. A three-star certificate might bear the name of a high-level official in the country of issue, in return for a hefty sum deposited in an offshore bank account. At the top of the scale, rating four stars, might be a genuine certificate obtained from the top political authorities of a country that had quietly agreed to provide transit facilities — it would be issued not in return for a personal payoff but for a percentage of the contract value to be paid to the treasury of the country of nominal destination.¹⁴

In short, the end-user certificate ceased to be a technique of control so much as a tool for the personal enrichment of corrupt officials in the purchasing country, and a means by which selling countries could establish an alibi (the weapons were supposed to go elsewhere) whenever news of a sale to some embargoed or illegal destination leaked out. Even worse, by the end of the 1980s, the end-user certificate system had not only been hopelessly compromised by deceit and corruption, but another development had rendered it almost irrelevant.

The second factor at work to undermine traditional supply-side controls derived from the simple fact that arms are by nature durable, capable of being recycled from conflict to conflict. Thus, one 20mm Lahti cannon built in Finland during the Second World War was, in the late 1940s, bartered to

a European arms dealer for light machine guns, then sold to an Italian dealer who resold it to the irregular Haganah forces in Palestine. In 1950 the Israeli army sold it back to the first merchant who subsequently unloaded it on Costa Rica. In 1955 that country peddled it to yet another arms dealer who had a customer, the Algerian *Front de libération nationale*, waiting. Five years later the weapon turned up in Panama, apparently in unusable condition. It was then shipped to the United States classified as a deactivated war trophy. By magic it acquired a new barrel and was passed on, first to anti-Castro activists and later to Haitian exiles plotting against the Duvalier regime, before it was finally impounded by the United States government.¹⁵ There are innumerable such stories in the arms business.

In the past such recycling was not a serious cause for concern. After each war, production of new material went into remission and the ravages of time and nature and minor conflicts eventually took care of the old stock. But now, with new material churned out on a more or less permanent basis by a host of producing countries, there is little chance of the stockpile actually falling. As long as the rate of production of new weapons exceeds the rate of physical deterioration or loss in battle of old ones, the world's available stock of weapons must inevitably grow. Moreover, each time a formal army decides to upgrade its arsenal, there is budgetary pressure to ease the financial burden by dumping the old ones on the second-hand market. This problem becomes considerably greater in an era of rapid model changes, when the rate of strategic obsolescence is far higher than the rate of technical depreciation.

Therefore, although the recycling of weapons from war to war is an old story, what is novel today is the sheer mass of second-hand equipment, the strong pressure to cut legal and moral corners in unloading it, and the downward trend in prices resulting from the glut. An AK-47 that used to cost about \$125 factory-fresh in the Soviet Union can now be picked up for \$30-\$40 on the Russian flea market. In Uganda its price is about the same as that of a chicken, while in Angola and Mozambique it will exchange for the equivalent of a bag of maize. On the Cambodian black market it may go for as little as \$8,00, about the same price as that of a pair of fake designer jeans.¹⁶ For the first time in history, it is the accumulated stock rather than the annual new flow that determines behaviour and sets the prices in the world market. It is exactly those accumulated stocks that have historically

been least amenable to control. And that leads to the third reason that supply-side controls no longer work.

In the past, states supplied weapons in three distinct ways. They sold them legally and openly to other states, following the proper procedures of accepting and verifying end-user certificates before issuing export-licenses. They sold them illegally and covertly to other states by diverting weapons through third parties or accepting false end-user certificates. And they secretly supplied non-state actors, working through cut-outs and intermediaries in the arms black market to hide the trail. All those things still occur. But today there is a new factor at work. Much of the clandestine portion of international arms transfers is the result of decisions not by states, acting directly or indirectly, but by autonomous actors, either corrupted military or political officials acting on their own account or, startlingly, by the actual users of the weapons. Guerrilla and insurgent groups, and the logistical apparatus that supports them, which traditionally appeared in the black market exclusively as buyers, are today functioning as suppliers as well. And that development derives from the emergence in zones of conflict of regional arms supermarkets stocked with seemingly unlimited supplies of second-hand weaponry.

The importance of such conflict zones for black market distribution comes not simply from the volumes of military supplies poured into them, but also from the fact that once arms are there, all trace is effectively lost, and they therefore can move out again with virtual impunity. A conflict zone is for weapons what an offshore banking centre with strict secrecy laws is for money — with the added advantage that anyone attempting to probe the secrets of the zone's arms business risks considerably more than the mere indignity of deportation. Indeed, so effective is the process that it has been known for intelligence agencies to deliberately ship more weapons than required for their purposes to a particular conflict area, just in order to be free to then divert them to some other, politically unauthorised or publicly unacceptable place. This appears to be how the CIA continued to equip both UNITA in Angola and the *contra* rebels in Nicaragua during periods when such aid was banned by the United States Congress. It merely diverted material from stocks approved for the Afghan *mujihadeen*. Similarly using the excuse that weapons have been obtained as war booty in the course of combat automatically obviates any need to respect or impose end-user

restrictions. This is precisely why, for a decade after its 1982 invasion of Lebanon, Israel could peddle with impunity enormous amounts of weaponry around the world, while claiming they had been captured from the PLO.

Apart from the United States itself, whose open arms bazaar has fed the needs of private paramilitaries, narco-militias, insurgents and terrorist groups across the Americas, as well as Japanese gangsters, Filipino landlord security forces and the IRA, the earliest of these regional supermarkets to emerge was in Bangkok. It dealt first with the spillover of weapons from the Vietnam and the related wars in South East Asia in the 1970s, and then was stoked further by conflict in Cambodia during the 1980s. In recent years everyone from Tamil separatist guerrillas to Burmese drug armies has turned to Thai arms merchants to replenish their supplies.

Next came Beirut. Within two years of the outbreak of the Lebanese civil war in 1975, and the consequent flocking into the country of arms dealers from all over the world, Lebanon, though itself still at war, became a net exporter of weapons to everyone from French mobsters to Turkish leftist insurgents to the Nicaraguan *contras*. And once the civil war ended, Lebanese militias managed to find a new vocation selling surplus arms to the breakaway republic of Croatia, then under international embargo.

Yet another was and is located in the Horn of Africa. Weapons of all sorts flooded into Ethiopia, Eritrea and Somalia during the 1970s and early 1980s, and then began flowing out again in the late 1980s and 1990s, nourishing conflict across eastern Africa without any noticeable diminution of the amount of weaponry in the hands of its own many militia groups.

Next came Afghanistan. During the 1980s at least ten billion dollars worth of weapons of all sorts poured in, the United States supplying the anti-government forces and the Soviet Union the government. From the start the United States pipeline began, not merely leaking, but spouting, with weapons diverted onto local and regional black markets into which everyone from Sindhi dacoits to Kashmiri rebels to embargoed countries like Iran could dip. Then, once the government fell, all of the Soviet-supplied weapons went into the same pot, with results that have been felt across South West Asia and North Africa and even into the Balkans.

But of all of these supermarkets, there is one that today plays an especially important role, partly by virtue of volume and partly because it has become the epicentre of black market patterns that have transcended the regional to the global, namely the yard sale erected on the ruins of the Warsaw Pact.

It started with the re-unification of Germany. With the pullout of the Red Army an enormous amount of military equipment was suddenly thrown onto the second-hand market. Then, with the united German army standardising around NATO models, the East Bloc equipment of the former East German forces became surplus and was available for a host of destinations. One third of the East German navy was overtly sold to Indonesia, top-of-the-line tanks were smuggled to Israel in a deal between the West German and Israeli intelligence services, while 250 000 AK-47s were covertly shipped to Turkey: since Turkey itself uses NATO standard equipment, the Soviet weapons are likely to be used to equip pro-Turkish paramilitary forces throughout the former Soviet Union.

However large these stocks were, they were a pittance compared to those freed, first by a Soviet-American arms reduction treaty (that, among other things, made no less than 10 000 tanks surplus), then by the collapse of the Soviet Union itself, the Red Army along with it. Together they meant the greatest stock of military surplus in history was suddenly dumped on the market.

It was a free-for-all. Desperate individual soldiers and entire military units sold their weapons in exchange for basic supplies. The emerging republics grabbed control of any material in their reach — often it was the very best which the Soviet Union had sent to guard the frontiers. Cities in Russia took over local arsenals and announced they were open to offers. The Ukrainian-Siberian Commodity Exchange switched from dealing in grain and oil to selling fighter planes, tanks and anti-aircraft systems. Fully \$2 billion worth was put on the auction block with the only restrictions that the buyers show an arms dealer's license, guarantee to take their purchases out of the territory of the ex-Soviet Union and prove they had the means to pay. Then there was the Kaliningrad yard sale: up to seven train loads a day arrived during 1992 to dump enormous amounts of weapons from across Eastern Europe into a compound with no accounting system and protected only by barbed wire and underpaid or unpaid soldiers. Not least, downsizing and drastic pay cuts put thousands of top Russian military engineers and

research scientists on an international market for military expertise in which the respectability of the destination was less important than the size of the paycheck.¹⁷

While some of this mass of weaponry stayed in Russia and fell into the hands of heavily armed criminal gangs, ethnic insurgent forces and private security firms, inevitably much of it poured onto the world market. Everyone from Italian Mafia hitmen to the Iranian government came shopping. Added to the stock was the continued flow of newly produced arms. After a failed attempt to promote conversion of factories to civilian production in the final days of the Soviet Union, Russia decided to encourage its arms manufacturers to seek foreign sales. While some weapons continued to be supplied for political reasons — to the former republics like Tajikistan to sway the balance in its civil war, or to Serbia and Serbian forces in Bosnia and Croatia — the watchword became commercial sales. And with Russia in the unique position of having flows of new material from its factories competing directly with stocks sold by its military, the result was top-of-the-line material at unbeatable prices.¹⁸

The emergence of all of these second-hand weapons supermarkets, particularly the one in the ex-Soviet Union, meant that the historical weaknesses of the arms black market were rectified: it could easily ensure continuity of supply, even of fairly sophisticated weapons; it could serve a global rather than just regional market; and with prices falling in the face of the glut, the cost disadvantage black market sales used to face compared to formally controlled ones began to vanish. Moreover, with both the commercialisation of sales of new equipment along with the progressive growth of second-hand stocks, prices now reflect quality and cost in a much more reliable way. Moreover, the growing potential for upgrades, which eliminates much of the generation gap between models, facilitates greatly comparison between different types of equipment. And the probability of a customer getting fleeced, something commonplace in a secretive and highly segmented black market, is that much smaller. For the first time in history, black market weapons could be not only cheaper than their legitimate counterparts, but have just as firm a guarantee of quality and reliability for the customer. Finally, in terms of the logic of operation of the arms market, the old distinction between ‘light’ and ‘heavy’ weapons became irrelevant.

The Commercialisation of Demand

Despite the massive supplies, the amount of weaponry officially entering the world marketplace seems to have been dropping substantially. Recorded arms transfers fell from a peak of \$46,5 billion in 1987 to a mere \$18,5 billion in 1994. That should be good news. There are several reasons, however, why it may not be.

One is that these numbers have to be adjusted upward to take account of the trade in dual-use technology and in upgrading services. A second is that, in response to the many attempts to restrict illicit transfers, production capacity has proliferated. When weapons cease to be transferred from country to country, where they have at least the potential to be monitored and controlled, and instead are produced at home, where they can be deployed and employed at the behest of the producing country without restrictions, it is scarcely a cause for relief that much of the reduction may be the result of the proliferation of production capacity around the world. A third is the fact that in the international arms trade, the *value* of the merchandise traded is a poor guide to its potential for damage. Value is determined by multiplying price times quantity, and much of the recent fall in value can be imputed to price cuts. A fourth is that the measured values obviously fail to capture unrecorded, unreported and illegal sales, which may well be on the rise. A fifth is that, even if the numbers do show a substantial drop, they do not take into account a subtle, but dangerous shift in the nature of the demand for weapons.

Apart from the role of weapons manufacturing to bolster employment and economic growth at home, the former Cold War arms boom involved an attempt by the West, led by the United States, not so much to prepare for a physical confrontation with the Soviet Union as to try to drive it into bankruptcy.¹⁹ The strategy was to lock the latter into a spending spiral in which the two camps would competitively waste as much of their national product as possible in stockpiling weapons they assumed would not be used. Although in the final analysis internal factors were much more important in bringing about the actual fall of the Soviet Union, the strategy of war-through-inventory accumulation actually contained a twisted logic. Since the main danger facing advanced capitalist economies was assumed to be a deficiency of the economy’s ability to absorb the enormous volume of civilian production of which the economy was capable, military spending to

inflate demand was one way of taking up the slack. On the other side, since the main problem facing the Socialist Bloc was a deficiency of total supply to fill the enormous gap in civilian demand, forcing it to waste resources in arms production would have the advantage of exacerbating the problem.

As a result, much of the weaponry being turned out, whether absorbed into the military inventories of the producing country or sold to its major allies, represented an appalling waste of resources and caused incalculable environmental damage in the process of production, though posing little immediate threat to human life. But now, with Cold War restraints gone, acquisition and use tend to go hand in hand, a shift rendered all the more dangerous by the release of accumulated Cold War stocks into the international arena.

This dangerous development has been reinforced by the second change taking place on the demand side of the market. In the weapons market, wishing will not automatically make it so. Demand is only effective if it can be translated into an ability to pay. In the past the payment methods in the international arms trade were relatively straightforward. States would provide arms to other states, legally and openly, either through gifts or by providing state-subsidised credit or by sometimes accepting payment in local (soft) currency. Since the fundamental reason for making the transfer was political, the fact that such sales were not commercially profitable was irrelevant; and the purchaser usually had little problem financing what was allocated. States would also covertly provide arms, either directly or by acting through the international weapons black market, to non-state actors, especially guerrilla and insurgent groups active against a political rival. Here, too, payment would take the form principally of political action. The closest states got to purely commercial considerations was when they sold arms illegally to embargoed states, although even then there might be a secret political agenda involved as well.

Thus, all these transactions were subject to political control. In the case of legal sales, that control was overt. When arms transfers took the form of illegally supplying an embargoed country or smuggling arms to non-state actors, control was covert. In these instances the intelligence agencies of the supplying country were generally on hand to arrange the deals, move the money and sometimes take a cut of the proceeds, a process facilitated by the

fact that the actual gun-runners were so often retired former intelligence officers or veteran military men.²⁰

Historically such constraints worked to limit, at least partially, the propensity of social, political and economic tensions to translate themselves into violent conflict. But in current market conditions embargoed states and ethno-sectarian insurgents alike have had surprisingly little trouble replenishing their arsenals, partly because the commercialisation of the trade eliminated most of the political constraints and partly because the rise of global underground economy has made it much easier to find the money to pay the bills. This is a factor particularly important in assuring that non-state actors can pay for what they need.

There are actually two major ways in which insurgent groups have been able to raise money to finance their activities, including their weapons purchases. One is through the use of external sponsors. During the Cold War these sponsors were usually political in nature. A country would quietly provide money to an insurgent group making trouble for a rival. Most of this occurred on the Western side. Although there was a popular misconception that the bulk of anti-state insurgencies were a product of a Moscow-based conspiracy, in reality most of the covert financial support provided by the Soviet Union to political dissidents went to Communist parties legally contesting elections. Even China confined its sponsorship of insurgencies to a handful of groups operating in countries on its immediate borders. However, the United States, Britain, France and Saudi Arabia provided a veritable cornucopia of aid to insurgent forces opposing Soviet-backed regimes. The main difference today is that the major powers provide little such aid; while the opportunities for independent fund-raising are far greater.

Even during the Cold War, not all of the outside support came from sympathetic or opportunistic governments. Ethno-religious solidarity also could play a role, as with the Irish in the United States pumping arms and money to the IRA or the Turkish diaspora in Germany sustaining the Grey Wolves back home. As the 1980s wore on and the 1990s dawned, this phenomenon became more widespread. Sikhs in Canada, Croats in Chile, Tamils and Kurds in Europe, Armenians almost everywhere, and many more all raise funds and arrange arms shipments to their co-religionists or

ethnic kin. They do so in two distinct ways. Some of the money is raised from legitimate business and donors using methods that are legal, even if the money is subsequently diverted to illegal uses. And some of it is raised through extortion, racketeering and smuggling. For along with the unparalleled expansion of international migration in the last two decades has come the formation of underground trade diasporas, regional and global networks based on extended family or ethno-sectarian loyalties which are well positioned by virtue of their contacts with the underground economy to smuggle everything from diamonds to designer jeans, from cigarettes to heroin, with at least part of the profits recycled back into arms.

The result is that a modern covert arms deal is likely to take place within a matrix of black market transactions. Weapons might be sold for cash, exchanged for hostages, bartered for heroin or religious artifacts, or counter-traded for grain or oil. The transactions, formerly dominated by veteran military or intelligence people, are now more likely to be handled by middlemen equally at home in smuggling rubies from Burma, sneaking counterfeit computer chips into the United States or dumping toxic waste in Lebanon. The transportation can be entrusted to a company whose headquarters is designated by one of several dozen brass-plates on the door of a small Cayman Islands office, staffed by one secretary who sits watching American soaps for the whole working day. To haul the arms such companies in turn will hire ships registered in one of the many flag-of-convenience centres that are so much the bane of seafarers' unions, marine insurance companies and government officials attempting to enforce arms trade embargoes. And the payments can move through a series of coded bank accounts in the name of a network of shell companies, protected by the banking and corporate secrecy laws of one or several of those financial havens.

Meanwhile, those engaged in the struggle on the home front usually evolve their own methods of financing, which in turn are closely linked to the military stage an insurgency has reached. In the earliest stage, a guerrilla group usually engages in hit-and-run operations against individual symbols of the state, either officials or isolated institutions like police stations and army outposts. At that stage the group's expenditure requirements are relatively small and mainly military. Hence, it can rely on fundraising activities based on similarly sporadic and predatory actions such as bank robbery and ransom kidnapping.

In the next stage the guerrilla group begins openly disputing the political power of the state, mainly through the conduct of low intensity warfare against the infrastructure of the formal economy. Confrontations are more intense, and the logistical requirements heavier. The guerrilla group's expenditure obligations are not only much greater in absolute amounts, but also include a rising social security component for the care of dependents of its militants, as well as providing some assistance to the population whose support it is attempting to win. Fundraising therefore shifts from once-for-all predatory operations to parasitic ones that yield a steadier and more dependable flow of income at the expense of the formal economy. The most important will be the 'revolutionary taxation' of income and wealth, sometimes voluntary, more often pure extortion.

In the third stage the guerrilla movement succeeds in implanting itself firmly on a piece of territory from which the state is effectively excluded. At that point it may well need to upgrade its arsenal to include material essential for defending its gains. And to its obligations for military operations and social security for dependents of its militants are added those arising from the provision of social services to the general population of the controlled area, and the building of the infrastructure necessary for the growth and development of a parallel economy. Fundraising ceases to be parasitic with respect to the formal economy controlled by the state and instead becomes symbiotic with the parallel economy being developed by the insurgent group.²¹

In this advanced stage, the most important sources of revenue come from indirect taxation — sales taxes on domestic commerce and/or export and import taxes on foreign trade which are not only lucrative but produce their revenues in the form of the foreign exchange so crucial to tapping the international arms black market. While taxing the growth and/or transit of 'recreational drugs' has been playing an increasingly important role in such financing almost everywhere in the world,²² none the less the income from taxing commodities that are inherently legal — everything from tea to teakwood — is likely much greater. Across South East Asia and sub-Saharan Africa, throughout Central Asia and the Indian subcontinent, this pattern is repeated.

During the Cold War era, this third stage was usually a prelude to a final assault on the state. However, one of the main ways in which the current

round of insurgent wars differs from its predecessors is that there is often no incentive to capture control of the existing state, a need that decreases as ethno-sectarian concerns replace more strictly political ones, and as the old state structure gets closer and closer to financial and political bankruptcy. Instead, the strategic objective becomes the creation of economically differentiated and ethnically-homogenous mini-states built around control of one or a few major resources that can be used on world markets to obtain arms of all sorts.

Lethal Distinction

For several decades it seemed reasonable to treat the arms market as if it could be separated into two components, one dealing in light weapons and the other in heavy. Initially the assumption was that the heavy stuff was the more dangerous, and for that reason arms control regimes gave it almost all of their attention. More recently the view has emerged that far more attention needs to be focused on small arms and light weapons. There are three reasons. One is that light weapons are the characteristic equipment of irregular warfare, of the multitude of ethnic and social conflicts spreading around the world. A second is that in actual conflict situations it is the light stuff that does the killing. A third is that it is light weapons which are most prone to getting loose. Granted the exact line of demarcation between the two have always represented something of a moving target,²³ none the less the difference was deemed sufficiently important as to merit policy explicitly formulated to counter light weapon proliferation.

In fact the problems inherent in the distinction go beyond merely finding an accurate definition of the dividing line. First, the distinction itself seems militarily artificial. It is true that in modern wars artillery, for example, has directly accounted for only about 2 per cent of battlefield deaths. None the less one of the most important roles of artillery in a conflict is to take out specific targets such as bunkers, leaving enemy troops exposed to the effects of 'light' weapons.

Second, the very concept of a 'light' weapon implies a differentiation based on physical properties — size, weight and mobility. But the relevance of this is ever more dubious at a time when advances in military technology

have given some hand-held weapons the capacity to inflict a level of damage formerly restricted to weapons that were decidedly 'heavy'. It is the threat from *Stinger* anti-aircraft missiles, not from the numerous large anti-aircraft cannons in the region, that causes civilian planes to divert their flight paths away from the Hindu Kush. The fact that so much military science consists of the development of weapons that are smaller and smaller in terms of scale and weight to accomplish larger and larger jobs in terms of explosive force and killing power suggests that this ambiguity in the light-heavy distinction will only become more problematic.

Third, it is unclear if the point of the definition is the actual weapon or the delivery system. A tank, for example, would fall into anyone's list of 'heavy' weapons. Yet its cannon and armour exist to deal with other tanks. Once that intermediate function has been carried out, the real role of the tank comes into play — namely bringing its machine guns to bear on unprotected or lightly protected infantry. At that point, with both its armour and its cannon redundant, the tank becomes militarily little different from a truck-mounted machine-gun or even one man-handled from behind a concrete barricade, items which are usually classed as 'light'.

Fourth, the distinction threatens to throw the focus onto a technical issue of delivery systems rather than on impact. Land mines, for example, fall into the category of 'light', since it has become standard in some bush wars to equip each infantry soldier with several of them. The land mine is a weapon that has been singled out for special opprobrium because it maims and kills indiscriminately and remains actively dangerous to civilians long after the conflict has moved on to other locations. On the other hand the projectiles used to scatter cluster bomblets are either dropped from aircraft or fired from artillery, placing them firmly in the 'heavy' category. But spread widely across an area, primed for delayed detonation, and used in brush or desert conditions where nature quickly conceals them, or, as during the Israeli siege of Beirut, hidden in urban debris, the actual cluster bomblets are difficult to differentiate from land-mines in terms of their ability to maim and kill indiscriminately long after the scene of battle has moved elsewhere.²⁴

Fifth, it may be a mistake to attempt to formulate arms control strategy on the basis of a distinction that comes down to an issue of military tactics.

During the siege of Sarajevo, for example, the fact that the Serbs used mortars (which are ‘light’) for random shelling and terrorising of the civilian population reflects not the special importance of the equipment *per se*, or the absence of heavier weapons in the Serb arsenal — they had plenty of those. Rather it was because the defenders had limited capacity for long distance defence, permitting the Serbs to approach close enough to leave the job to mortar teams. The impact on the population would have been little different if barrages of accurate artillery fire had been used instead.

Sixth, since weapons are demanded not according to their inherent nature but for what they will accomplish, a conflict like the Lebanese civil war might start with weapons that are unambiguously light. But in that case each successive escalation induced the belligerents to move further up the light-heavy continuum until tanks threatened to become a hazard to automobile traffic in Beirut streets. In short, what is in demand depends not on a technical light-heavy distinction, but rather on what material one side has already obtained, and what, in response, the other side needs and can afford to acquire.

Seventh, the insistence on the difference between ‘light’ and ‘heavy’ weapons reflects in some degree the simplistic dichotomy between informal and formal warfare, and the accompanying assumption that light weapons characterise the first, and heavy the second. In reality there is a continuum, revealed in, for example, the Horn of Africa, where irregular forces started with hit and run tactics, graduated to sustained guerrilla actions and then went on to large-scale insurgency before evolving into a state of full Civil War — at which point the distinction between formal and informal warfare largely vanished. That continuum in tactics will also dictate a continuum in choice of optimal weapons, something further reinforced by the nature of the terrain on which conflict is undertaken.

If a small guerrilla force needs mobility, it avoids heavy material which is not only burdensome but difficult to hide. Similarly, inside a crowded urban area, co-inhabited by both sides, where the targets must be selective, ‘light’ weapons might well do the job. But as the degree of security of the insurgent force increases, so too will its territorial hold; and that will raise its requirement for major weapons systems to defend its gains, along with its capacity to raise money to purchase those weapons.

Furthermore, the implicit equation of irregular war with light arms seems to be based on a notion of the inherently limited size of irregular forces. In fact ‘guerrilla’ armies can swell, as in Afghanistan, to number in the hundreds of thousands and move about in armoured personnel carriers while settling scores with multiple-barrel rocket launchers. Indeed, the *Taliban* who now dominate Afghanistan started as a lightly armed insurgency-within-an-insurgency and were soon flying MiG fighters against other factions. Thus, any perceived proliferation of struggles waged overwhelmingly with light weapons might well reflect not so much a matter of a firm choice of tools *per se*, but rather of the relatively early stage (in military-strategic terms) which the conflict has reached or the precise nature of the terrain on which it is fought.

Eighth, the notion that reliance on ‘light’ weapons is more characteristic of irregular warfare and reliance on ‘heavy’ inherent in the nature of formal warfare may not only be based on a static view of the former, but may represent a technical oversimplification as well. Given the direction of military technology, the ‘formal’ conflicts of the future may well involve regular forces that are very widely dispersed, highly mobile and dependent on extremely good intelligence about their terrain and target.²⁵ In form they will differ little from today’s guerrilla war, the difference being largely a technological one. While irregular forces score intelligence successes by keeping their ears to the ground, the future regular soldier will do so by keeping his or her eyes on the screen. Who knows to what degree modern heat- and sound-sensing equipment, and the digital information processing technologies that go with it, are really an ‘advance’ so much as a means of permitting humans raised in a modern urban environment to catch up with their more ‘primitive’ counterparts who are well tuned in to the terrain and environment in which they have always lived?

Ninth, even if the logistical difference between the two forms of warfare is a reasonable approximation, the special attention given to light arms also presumes that the principal problem will remain, for the foreseeable future, internal civic strife rather than state-to-state conflicts. This assumes that internal wars have exclusively internal causes, whereas many can be stirred up by external forces for political gain, just as in the Cold War era. No better example exists than in the current conflicts in Central Africa, Uganda and Angola who are really at war without any need for formal armies to push

past frontiers. And such ethno-sectarian based strife, even if initially internal, has the potential to spill over borders and, as in the Balkans, draw in other countries who choose to come to the defence of their ethnic kin or co-religionists.

Tenth, the entire distinction rests on a view of the international arms market that is decidedly passé. Certainly the distinction had its uses in the past because the 'heavy' material assumed destined largely for formal armies was subject to political control and the 'light' material to equip irregular forces seemed much more susceptible to black market transactions. However, today the arms market is glutted, not just with 'light' weapons, but also with second-hand artillery, recoilless rifles, missiles and tanks. On that market the primary issue is not whether the material sought is light or heavy but how much the order is worth and whether would-be purchasers have the necessary connections and money, two things which are improving all the time.

Conclusion

There has been a tendency to give credit for the Cold War peace to the fact that, thanks to the strength of their armed forces, each side had too much to lose to engage in a shooting war. In reality, most of the credit should have been given to memories of the carnage of World War II; the development of international institutions that could mediate disputes; the ability of Europe, albeit divided, to play a conciliatory role with both sides; the relative economic self-sufficiency of the two major protagonists which reduced international competition for resources; and the fact that, since the stakes were less territorial than political, much of their competitive energies could be channelled into bribing or bullying other countries into lining up, however temporarily, on one side or the other.

Thus, the massive production of arms during the Cold War deserves little credit for keeping the peace. But it does deserve a large part of the blame for laying the foundations of today's glut of arms. Although the ready availability of weapons is not the primary cause of the current epidemic of political and social conflict, it does considerably exacerbate it. It also bears much of the responsibility for the upsurge of criminal violence — biker

gangs in northern Europe settle disputes with bazookas, ivory poachers hunt elephants with machine guns and helicopter gun-ships, and the last fifteen years have seen a dramatic upsurge of incidents of armed piracy-at-sea, some of it conducted by men with military training and equipment.

The problem of the enormous volume of arms production and its steadily increasing rate of dispersion is clear enough. What to do about it is far less so. Policy can be directed at three logically distinct, though not mutually exclusive, levels.

The first is to attack the actual trafficking. This runs afoul of a number of obstacles — apart from the obvious fact that, in the absence of measures to simultaneously reduce demand, restrictions on the flow of weapons merely lead to countries developing their own production capacities. The machinery for smuggling today is extremely sophisticated. Nor is it limited to small, precious items like diamonds. Today oil, grain, lumber and containers of consumer goods are smuggled all over the world with virtual impunity. Even if the traffickers in guns get caught, they are, like those in narcotics, easy to replace. And the real problem is not the greed of the trafficker who is merely an intermediary. Before a trafficker can do the job, it is necessary to have something to sell and someone to whom to sell it.

Therefore the second level of possible attack is on the supply side which must be further subdivided into primary (the production of new equipment), secondary (the distribution of old stocks) and tertiary (the dispersion of arms into the hands of the user population) levels. With all three the obstacles to control are formidable.

Perhaps the greatest impediment to primary supply control is governments whose behaviour, with respect to the world weapons trade, is based on equal portions of short-sighted financial expediency and sheer hypocrisy. Those who put their faith in primary supply control insist that it has never really been tried, and cite as proof all the holes in the existing regulations. But those holes have been deliberately created by governments precisely to let certain deals get through. The issue, then, is not how to reform the rules but how to change the attitude of the states supposedly

enforcing them. And this lack of enthusiasm shown by so many governments for genuine policing from the supply side reflects something even more dangerous.

For decades governments in the West used military expenditure as the central instrument for pump-priming economies in recession, therefore increasing the productive capacity of the arms industry and the flow of new material. Even now, in spite of the loss of the legitimisation formerly provided by the Cold War, economic pressure on politicians to maintain extremely elevated levels of military spending has proven hard to resist. That has been complicated by the fact that, unlike the situation just after the Second World War, conversion today is difficult. The reasons are partly technical and partly the absence among arms producers of a corporate culture and infrastructure for success in the civil sector. Nor has there been any evidence of governments' willingness to allocate sufficient funds to cover the huge overhead costs of conversion. Hence, even if fiscal pressures finally force the governments of the main industrial countries to slash military spending, they will also constrain governments' willingness and ability to pay for alternatives. Failing any broad-based commitment to industrial restructuring, the only result of reducing domestic expenditures for arms procurement will be arms manufacturers pushing export sales all the harder. They will then run up against competition from a whole host of other eager producers. For many developing countries stimulating weapons production is a deliberate tool of industrial development. And for ex-Socialist countries it is often the most immediately viable source of desperately needed foreign exchange.

Thus, genuine supply-side control requires weaning industrial and industrialising economies off their addiction to war industries for jobs, technical change and money. That is a tall order. Nor is it enough. For effective supply-side control also requires addressing the problem at the secondary level and doing something about the accumulated stocks. After the Second World War that seemed briefly possible. But today it is difficult to see a new Sam Cummings on the horizon, not least because his role would be to remove (permanently, in this case) from the multitude of second-hand markets, not only the light weaponry as of old, but all the stockpiled tanks and planes and artillery pieces. Apart from the huge cost, the logistics of such an operation would be awesome.

Finally, no measure of supply-side control can be truly effective without addressing the tertiary level — the arms already in the hands of the public at large, including criminals and insurgents. Efforts can be made to do so through increased policing. But rarely, if ever, in the face of a pressing need for the weapons, have repressive tactics had much success. Israel turned the Gaza region of Occupied Palestine into the world's largest concentration camp, policed through the most *avant garde* of surveillance technology bolstered by networks of paid informants, mass deportations, collective punishments and free-wheeling death squads. Yet, at the end of the twenty-seven years of military rule, weapons in the hands of the population were far more abundant than at the beginning.

The alternative is buybacks and amnesties to encourage the voluntary handing in to the authorities of illegal weapons. The record of success is spotty and geographically very limited. All too often it is only the worst junk that is handed in. Furthermore the most dangerous elements in society, those most prone to using their weapons, are the last to surrender them, if they ever do. Tertiary supply-side control ultimately bumps up against the fact that the arms supply business is subject to the law of entropy — the further the material moves away from the primary source and the greater the degree of dispersal, the greater the problems of putting the process in reverse.

Any global solution will, of course, require paying considerable attention to all three levels on the supply side: encouraging conversion, tightening regulations and encouraging the voluntary disarming of populations. But none of this will work miracles, or even have any discernible long-term effect unless attention is simultaneously focused on the demand side of the market. Contrary to the conviction of those who still hold the 'merchants of death' responsible for conflict and war, the arms market has been, and always will be, driven from the demand side.

Attacking the problem of arms proliferation from the demand side requires addressing squarely the other main causes of the current wave of violent conflict. It requires shifting loyalties back, away from clan, sect and tribe in favour of rebuilding civil societies. It also requires that something be done to rectify the current gross inequities in the global and local distribution of income, wealth and ecological capital. In short, the best way to attack the

economy of weapons production and the infrastructure for arms distribution may well be to render the weapons that do exist irrelevant.

Endnotes

- 1 Acknowledgments: This paper is the offshoot of research conducted over several years on the emergence and operation of modern black markets, including those for arms. It has benefited from the critical input of many persons, and from the financial support, in the past, of the Social Sciences and Humanities Research Council of Canada; at present it is assisted by the John D and Catherine T MacArthur Foundation. Some of the arguments were initially published in *The Structure and Operation of the Modern Arms Black Market* in J Boutwell *et al.*, Lethal Commerce: The Global Trade in Small Arms and Light Weapons, American Academy of Arts and Sciences, Cambridge, MA, 1994 and in, *Loose Cannons: Covert Commerce and Underground Finance in the Modern Arms Black Market*, Crime, Law and Social Change, 25, 1995. The main themes are currently being developed into a book-length study entitled, Loose Cannons: Inside the Modern Arms Black-Market.
- 2 This point is well made by Virginia Gamba in the *Introduction* to a series of case studies, Managing Arms In Peace Processes, UNIDIR, Geneva, 1995 and 1996.
- 3 The theme of ecological causes of conflict has been convincingly treated by Thomas Homer-Dixon. See especially, *On the Threshold: Environmental Changes as Causes of Acute Conflict*, International Security, 16 (2), Fall 1991; and *Environmental Scarcities and Violent Conflict: Evidence from Cases*, International Security, 19(1), 1994.
- 4 See T Dale and V Carter, Topsoil and Civilization, Oklahoma Press, Norman, Oklahoma, 1955. They point out that the sole important exceptions — and therefore the real birthplace of civilisation — are the areas served by the Nile, Indus and Tigris-Euphrates river systems whose annual flooding replenished the soil. Also interesting in this regard is C Ponting, A Green History of the World, Sinclair-Stevenson Ltd., London, 1989.
- 5 This *de facto* merger of the political and criminal is commonly referred to as a 'grey area phenomenon'. See, for example, P Lupsha, *Grey Area Phenomena: New Threats and Policy Dilemmas*, paper presented to the High Intensity Crime/Low Intensity Conflict Conference, Chicago, 27-30 September 1992.
- 6 The classic work, highly influential at the time, was by H C Engelbrecht and F C Hanighen, Merchants Of Death: A Study of the International Armament Industry, Dodd, Mead, New York, 1934.
- 7 This history is reviewed in J Stanley and M Pearton, The International Trade in Arms, Praeger, New York, 1972.
- 8 For background see J De St Jorre, The Nigerian Civil War, Hodder & Stoughton, London, 1972.
- 9 Sam Cummings' career is traced in P Brogan and A Zarca, Deadly Business: Sam Cummings, Interarms and the Arms Trade, Norton, New York, 1983.
- 10 These points are well made in R Kaufman, The War Profiteers, Bobbs-Merrill, New York, 1970, p. 26; and R W Howe, Weapons: the International Game of Arms, Money and Diplomacy, Doubleday, New York, 1980, pp. xxiii-xxxv.
- 11 There had been a very active debate in the United States concerning the extent to which the military-industrial system really has contributed to American prosperity. For the negatives the finest research has been by S Melman in Pentagon Capitalism, McGraw Hill, New York, 1970; The Permanent War Economy, Simon & Schuster, New York, 1974; Profits Without Production, Alfred A Knopf, New York, 1984; and The Demilitarized Society, Harvest Books, Montreal, 1988. There is a useful summary of his views in The Nation 20 May 1991. There is also a large body of literature strongly influenced by Melman. See, for example, A Markusen and J Yudken, Dismantling the Cold War Economy, Basic Books, New York, 1992. But see also the interesting critique by D Henwood in Left Business Observer 17 April 1991, 3 June 1991.
- 12 In fact, this could well be exaggerated by partisans of arms exports. A study done in Sweden in the mid-1980s showed that eliminating arms exports would raise unit costs for the Swedish military by a mere 1 per cent per year (Inside Sweden 3-4, September 1987).
- 13 This refers to the trade in conventional arms. Clearly the capacity of nuclear weapons to inflict awesome destruction has varied little in the past three decades.
- 14 This 'stars' analogy is from W De Bock and J-C Deniau, *Des Armes Pour L'Iran*, Paris, 1988, p. 41.
- 15 G Thayer, The War Business, New York, 1969, p. 133.
- 16 Observer 16 August 1992; World Press Review, November 1993; C Smith *Light Weapons and the International Arms Trade* in UNIDIR, Small Arms Management and Peacekeeping in Southern Africa, UNIDIR, Geneva, 1996, p. 9.
- 17 Financial Times (London), 24 January 1992, 6 February 1993; Observer (London), 16 August 1992, 28 February 1993; Sunday Times (London), 26 January 1992; The Moscow Times, 31 March 1994.
- 18 The Washington Report on Middle East Affairs, August/September 1992; C Petersen, *Moscow's New Arms Bazaar*, Orbis, Spring 1994; The Wall Street Journal, 2 September 1994; Sunday Times (London), 30 May 1993; Washington Post, 25 October 1992.
- 19 This strategy was a factor in United States arms policy from at least the late 1960s. However, it has been claimed by boosters of the Reagan administration that it was in the 1980s, under the sponsorship of CIA chief, William Casey, that it really locked in, together with a whole host of other instruments of economic warfare. (See P Schweizer, Victory: the Reagan Administration's Secret Strategy That Hastened the Collapse of the Soviet Union, Atlantic Monthly Press, New York, 1994.)
- 20 For an analysis of how the process worked, see R T Naylor, *Loose Cannons: Covert Commerce and Underground Finance in the Modern Arms Black Market*, Crime, Law and Social Change, 25, 1995.
- 21 These issues are analysed in R T Naylor *The Insurgent Economy: Black Market Operations of Guerrilla Organizations*, Crime, Law and Social Change, 20, 1993.
- 22 See the various issues of the Paris monthly, Observatoire Géopolitique des Drogues, besides its annual report, Géopolitique de Drogues, Paris, 1995.
- 23 See the list of possible definitions of 'light' weapons in A Karp, *The New Major*

Weapons, Ploughshares Monitor, September 1995.

- 24 Interestingly, even the especially macabre and inhumane character of mines may reflect not the mine *per se*, but the way in which it is employed. In the hands of insurgents with a clear ideology locked in a politically-motivated combat against a defined opposing force, as was typical in Central America in the 1980s, for example, mines are deployed in a reasonably disciplined way against military targets; whereas when the purposes of the conflict involves ethnic cleansing and mass terrorism they are scattered without discipline or restriction. This was documented by the International Committee of the Red Cross in their Anti-Personnel Mines in Central American Conflict and Post-Conflict, ICRC, Geneva, 1996. I am indebted to Dr Peter Lock for bringing this to my attention. Ironically, in this respect, the ‘heavy’ cluster bomb is less susceptible of being used in a restrained way than is the ‘light’ land mine.
- 25 See The Economist, 8 March 1997, for a survey of some of these developments.