

Chapter 16

Concluding Remarks

*Stephen Martin
Centre for Defence Economics,
University of York, UK*

The aim of this chapter is to identify any common themes that emerge from the case studies and the associated lessons that can be drawn for public policy towards offsets. Given that the analysis has focused on a variety of countries, often with very different defence, economic, industrial and political backgrounds, it might be anticipated that few, if any, such points would materialise. Indeed, given the various forms of offset (such as co-production, licensed production, direct and indirect offset) and the different policy objectives, the task of identifying any common themes might have proved an onerous one. On the contrary, though, there appear to be a number of findings which, whilst not readily apparent in all of the case studies, come through sufficiently strongly to warrant discussion.

Perhaps the first point to make — and one which applies to virtually all countries — is that the absence of a reliable and consistent body of data makes any evaluation of offset programmes incredibly difficult. Indeed, in some cases the only publicly available data was the financial size of the offset together with a very brief description of the type of work which was considered to be eligible towards the vendor obligation. This data deficiency is all the more surprising given the substantial financial sums that are often involved and the fact that the offset package has sometimes proved the decisive factor in a purchaser's choice of vendor. Indeed, the US is the only country where regular and rigorous attempts have been made to track the impact of offsets in terms of jobs, technology and international competitiveness. Here, of course, the focus is on the domestic impact of offsets associated with US exports, rather than that associated with US imports (which is the more relevant scenario for most countries).

Typically, the impact of a direct/indirect offset is measured in financial terms (e.g. \$500 million over a five-year period) and, in these circumstances, the success or failure of the offset depends on whether the vendor meets its obligation within the specified time period. However, the usefulness of this approach towards the evaluation of any offset programme depends on whether the work which is eligible towards an obligation actually occurred as a result of the offset, or whether it merely reflected existing business relations. If it is the

latter case, then the impact of any offset, no matter how large financially, is likely to be rather trivial.

Also relevant for the evaluation of any offset is information on the programme's cost. That is, how much more does the offset cost compared with an off-the-shelf purchase? Many, but not all, states seem wedded to the idea that offsets are free goods and are reluctant to publicly admit that an offset costs more than an off-the-shelf purchase. Once this is recognised, though, further issues arise concerning the cost effectiveness of the offset programme and whether there are any other policy instruments which could obtain similar benefits for a smaller outlay.

Aside from the lacuna of data, the case studies reveal a number of interesting themes. First, offsets have involved a learning experience for both the vendor and purchaser and, as with any new initiative, both parties probably made mistakes in the early days. Vendors might have underestimated both the cost and the degree of difficulty with meeting their offset commitments. Initially, offset agreements were often on a 'best endeavours' basis but, as a number of countries learnt, financial penalties for the non-fulfilment of offsets proved a better incentive than the much vaguer 'best endeavours'. Firms in a number of purchasing countries initially, and quite erroneously, believed that an offset obligation guaranteed them orders irrespective of their cost and quality performance and, when such sales did not materialise, it led to widespread disenchantment with offsets. Also, firms with an obligation would, understandably, seek offset credit for as many purchases as it could lay claim to, irrespective of whether they met the necessary criteria. Consequently, administering offset programmes, particularly large ones, proved an onerous task. Inevitably disputes will arise over whether work is new work, generated by the offset, or whether it reflects established business patterns. Similarly, there will be debate as to whether the work meets the necessary technological standards and, where there is no obvious market price, there might be difficulty attaching a mutually agreeable value to, say, technology transfers. These teething troubles are inevitable although experience suggests that they decline as both parties become more familiar with each other. The only way around many of these problems is to agree a package of offset work in advance rather than wait for the vendor to place work with domestic industry. However, this is simply not practical for, say, a \$1 billion worth of indirect offset!

Second, there seems to have been a move away from rather general offset programmes with broad eligibility criteria, and towards more focused measures. This might reflect the recognition that offsets cost more than an off-the-shelf purchase and that purchasers wish to concentrate their scarce resources in specific areas rather than provide a general subsidy to all of industry.

Third, the time horizon of those seeking offset seems to have lengthened, particularly in countries with a developing defence industry. One of the criticisms of offset is that once a vendor has fulfilled its obligation it will transfer its business to another state where it has an outstanding commitment. To overcome this, many countries allow a firm to bank offset credit in anticipation of a future obligation and this provides an incentive for the firm to continue placing work with domestic manufacturers. Of course, many countries are seeking the production work that this can bring and so the banking arrangement is the appropriate response to this form of short-termism. However, developing defence industries often want more than just production work, with technological and marketing skills being particularly attractive. To induce foreign manufacturers to share these assets, a number of countries now seek to draw foreign firms into the domestic economy through either equity investments in existing domestic firms or the establishment of joint ventures. Both approaches provide the foreign firm with an incentive to continue to place work in the domestic economy and to share other skills as this increases the profitability of its overseas investment.

The interpretation of this move away from broadly defined short-term offset work and towards a more focused long-term investment strategy is, by no means, clear cut. It could be that it reflects what is perceived to be the failure of the former approach and that, as alleged, foreign suppliers cease placing work in the domestic economy once their offset obligation is complete. An alternative interpretation would emphasise the success of the offset strategy in laying the foundations on which future joint ventures could be built. By encouraging foreign firms to place work with domestic manufacturers, both parties become familiar with doing business with each other. The foreign firm is made aware of the capabilities of domestic manufacturers who, in turn, become aware of the cost and quality requirements for sales to the foreign firm. In this scenario, offsets force domestic manufacturers to become more efficient and, once this has occurred, make the foreign manufacturer more willing to invest in the local firm. The move away from offsets and towards joint ventures does not reflect the failure of the former; rather, the reverse. Of course, this form of offset is likely to be more attractive to those countries with a developing defence industrial base than to states that have less of a need for new technologies.

Finally, none of the country studies provide any evidence to suggest that offsets are likely to disappear in the foreseeable future. Certainly, the US has unilaterally sought to limit the size of offset that American firms can offer and Congress has passed a bill that limits the steps that US firms can adopt to fulfil any offset obligation. As part of a Code of Conduct for defence trade, the US has also sought multi-lateral agreement with its NATO partners to limit and eventually eliminate all offsets, which it views as a barrier to defence trade. However,

since an initial draft in 1992, the Code of Conduct has made little progress towards being a more substantive document and thus the prospect for a mutual elimination of all offsets, within this forum at least, remains remote. Elsewhere, as long as purchasers continue to require offsets, and there is no reason why they should cease to do so, competitive pressures will force vendors to meet such demands.

Index

Each country's main entry (usually a complete chapter) is in bold. For the reader's convenience, particular areas of interest may also be included as a subheading.

- AACC (Aircraft Accessories and Components Company) 238
- abolition of offsets: Australia 58
- Abu Dhabi 142, 150
- access to overseas markets *see* international marketing
- acquisition programmes 10–11, 312–3, 315, 317
- administration costs 68, 368–9, 391
- administration of programmes 87–8, 307–9, 316, 323–4, 332–3
- Advanced Electronic Company (AEC) 236–8
- advantages of offsets 84–5
- Aerospace Industries Association of America (AIAA) 32, 42
- aerospace products 34–5, 37–8
- AGECO (Trading Offsets Association) 155
- agricultural commodities: countertrade deals 26–7
- AIFV (Armoured Infantry Fighting Vehicle): Belgium programme 96–9
- Aircraft Accessories and Components Company (AACC) 238
- Al Salam Aircraft Company (ASAC) 238–9
- Al Sawary II programme 233
- Al Yamamah I and II programmes 3, 228, 233–6, 240–2
- analysis of client nation: Israel 398–401
- arms proliferation 275, 367
- AT&T 232
- austerity programmes 25
- Australia 4, 6–7, 41, **49–70**, 143, 389
 - evaluation of programmes 58–69
 - history of programmes 50–8
 - policy goals and offsets 69–70
- Australian Production 55–6
- Austria 145, 149, 154, 387
- AV-8B Harrier: Spanish programme 10
- AWACS aircraft: UK programme 8, 338–48, 352, 387
- balance of payments 40
- banking industry: offset organisations 155
- barter 28–31, 140, 390
 - definitions 15, 32
 - economic motives 19–21, 24–6
 - French exports 140–1
- Barter, Office of (US) 371
- barter/counterpurchase model 30
- basic commodities: countertrade deals 26–8
- “basket of opportunities” 385
 - Israel 397, 402–4
- Belgium 4, 35–6, **75–103**, 146–7, 152, 154
 - AIFV programme 96–9
 - appraisal of offset policy 99–101
 - economic constraints 75–83
 - F-16 programme 2, 87, 89, 91–5, 100, 139–40, 359
 - future of offsets 101–3
 - offset policy and federalisation 5, 88–91, 154
 - offset requirements 143, 353
 - offsets and the economy 7, 83–8
- birth of offsets 139–40
- Boeing Corporation 387
 - Peace Shield programme 231
 - UK AWACS programme 8, 338–48, 352, 387
- Brazil 144, 151, 154
- British Aerospace
 - Al Yamamah I and II programmes 233–4, 235–6, 241, 242–3
 - Taiwan Aerospace Corp.
 - co-production 267
- buy-back 28–31
 - definitions 16, 32
 - economic motives 19–20, 22–6

- Canada 4–7, 41, 107–30, 147
 defence issues 108–12
 EH-101 programme 124–7
 industrial and regional benefits policies 112–24, 127–30
 capital equipment: countertrade deals 27
 capital/technology packages: and buy-back 22–4
 cash payments: immediate reduction 141–4
 CF-18 Hornet: Canadian agreement 112–7
 China, Peoples' Republic of 154, 246–7, 248, 261, 268
 China, Republic of *see* Taiwan
 civil reciprocity *see* countertrade
 civil-sector procurements 387
 civilian sales: US offset policy 370–1
 clearing arrangements 15–6
 collaborative development/production programmes 1–2
 comparative volume 3–4
 competition 43, 121–2, 375
 competitors: development of 9, 204–9, 274–5, 389
 conflict: between contractor and client nation 384
 construction projects 26–7
 control of programmes 87–8, 307–9, 316, 323–4, 332–3
 co-operation: between contractor and client nation 7, 383
 co-operative programmes 204–9, 313–7
 co-production
 Belgium 80, 146
 benefits 330
 definitions 2, 31–2
 European trends (1950–1990) 33–7
 Greece 167–8
 US-Japan 200–4
 cost premiums 408
 Australia 6, 67–8
 Belgium 7, 86, 95, 99
 Japan 203
 Spain 310
 Switzerland 12, 332–3
 UK 353–4
 United Kingdom 8
 counter-contracts, deferred 144–5
 countergifts 152
 counterpurchase 28–31
 definitions 16, 32
 economic motives 19–21, 24–6
 French exports 140–4
 counterpurchase/barter model 30
 countertrade 390
 Al Yamamah programme 233
 definitions 15–6, 32
 economic motives 17–26
 empirical overview 26–31
 US policy 370–1
 volume 16–7
 credit, offset *see* offset credit
 Credit Deeds 54
 credit-worthiness: and barter 30
 credits 151–2
 cross arms contracts 144
 current trends: in offset practice 386–92
 Daewoo Heavy Industries 278–9
 Dassault Aviation 140, 142–3, 149
 data on offsets: lack of 3, 40–1, 407
 deception counterpart 152
 declarations of intent 144
 defence environment: downsizing 389
 defence forces: development of 273–4
 defence industrial base (DIB):
 development of 9, 39–40, 275–6
 Defence Offsets 55–6
 defence preparedness: OMB report 42
 deferred counter-contracts 144–5
 deferred payment 150–1
 definitions
 countertrade 15–6, 32
 offsets 2, 6, 31, 83–4, 140–1
 Democratic People's Republic of Korea (DPRK) 246–8
 Denmark
 European F-16 programme 2, 87, 89, 91–5, 100, 139–40, 359
 offset requirements 353
 dependence on offset work 7, 86
 Designated Work 55–6
 DIB *see* defence industrial base
 direct investment 390

- direct offsets 6, 32–3, 41, 235, 386, 388–9
 definitions 2–3, 6, 83–4
 disadvantages of offsets 85–7, 99–101, 365
DPRK (Democratic People's Republic of Korea) 246–7, 248
 dumping 20–1
- Eastern bloc:** countertrade deals 26
 economic compensations 83
 economic motives
 countertrade 17–27, 29
 offsets 37–40
 economic rent 38
 Egypt 147–9
EH-101 programme: Canada 124–7
 empirical overview
 countertrade 26–31
 offsets 40–4
 employment: US 43–4, 373
 employment policies 39–40, 100
 energy products: countertrade deals 26, 28, 30
 equity investments 8, 10–11, 315, 409
Europe: procurement trends (1950–1990) 33–7
European Union (EU): common defence policy 101–2
 evaluation of programmes 3–4, 407–8
 export levels: and countertrade 24–5
 exporters survey: UK 342–7, 351–2
 exports *see* international marketing
- F-5 aircraft: Swiss programme 12, 322–9, 359–60
F-15 aircraft: Israel programme 392–3, 405
F-16 aircraft: European programme 2, 87, 89, 91–5, 100, 139–40, 359
F-16C aircraft
 Greek programme 11, 170–1
 Israel tender 392–3, 404–5
F-18 aircraft
 Israel tender 393, 404–5
 Spanish programme 9–10, 299, 300–11
F-86 aircraft 34
- F-104 aircraft 34
F/A-18 aircraft: Finnish programme 366–7
Federal Republic of Germany (FRG) 35–6, 148
 finance packaging 12, 150–2
 financial offsets 141–4
 financial penalties 98, 408
 Finland 142–3, 145, 149, 155, 390
 F/A-18 programme 366–7
 focusing of measures 408
 foodstuffs: countertrade deals 26–7
 foreign direct investment (FDI)
 restrictions: and countertrade 21–2, 24–5, 30
 foreign exchange payments: to reduce 19–20, 144–8
 forms of defence procurement 1–3
 forward markets: absence of 24–5
 France 4, 11–2, 35–6, 139–56, 392
 Al Sawary II programme 233
 clauses equivalent to offsets 150–4
 offsets and exports 140–50, 154–6
 offsets and imports 156
FRG (Federal Republic of Germany) 4, 35–6, 148
 fuels: countertrade deals 30
 fulfilment of offset obligation 10, 152–3, 307–9, 323–5, 408
 future markets: absence of 24–5
 future of offsets 409–10
 Belgium 101–3
 Europe 101–2
 Japan 209–11
- GATT treaty 391
General Dynamics 11
 F-16 aircraft 2, 87, 89, 91–5, 100, 139–40, 359
General Electric 11–2
 F-5 aircraft 12, 322–9, 359–60
Germany 4, 35–6, 148
GIDC (Greek Investment Development Company) 11, 170
 gifts 152
 givers of offset work 4
Glaxo Saudi Arabia 240–1
 goods: types, OMB report 41

- goods offsets 2–3
 governmental regulation 386, 388, 391, 409
 grant aids: US 367–8
Greece 5, 11, 35–6, **163–75**
 critique of offset policy 172–4
 offset agreements 141, 143, 146–7, 149
 offset benefits policy 164–9
Greek Investment Development Company (GIDC) 11, 170
Gulf countries 141, 149–52, 386, 390

high value agreements 387–8
Hughes Aircraft Company: Peace Shield programme 232
Hyundai Precision and Industrial Corporation 279

ICA (Industrial Cooperation Authority) 394–5
 impact of offsets: OMB report 42–4
 importance of offsets 12, 154–6, 387
 importers survey: UK 342–3, 347–52
 incentive payments: US 366
India 141, 143, 148–51, 154–5
 indirect offsets 32–3, 41, 381, 386, 388–90
 Al Yamamah programme 235
 Australia 6
 Belgium 84–7
 definition 2–3
Indonesia 389
 industrial competitiveness: OMB report (US) 43
Industrial Cooperation Authority (ICA) 394–5
 industrial equipment: countertrade deals 28
 industrial offsets 142–4
 industrial policy 7, 8, 100
 infant-industry 39, 85
 information asymmetries: in technology markets 22–4
 infrastructure: countertrade deals 28
Inglis Review (1984) 52–3, 57
 international marketing 11, 21, 30, 39
International Systems Engineering (ISE) 239

International Technology Sourcing (ITS) 5, 7, 381–2, 406
 Israel campaign 382, 392–4, 396–405
 offset philosophy 382–6
 international trading system: impact of offsets 374
 investment, overseas 32
Iran 142
Iraq 142
ISE (International Systems Engineering) 239
Israel 5, 7, 41, **381–406**
 offset policy 394–6
 Peace Fox VI/Peace Marble IV competition 382, 392–4, 396–405
Italy 2, 35–6, 152, 195
ITS *see International Technology Sourcing*

Japan 5, 8–9, 13, **177–211**
 benefits of co-production 200–3
 co-operative programmes and competition 204–9
 cost of programmes 204
 defence-industrial strategy 180–8
 defence industry and foreign technology 195–200
 defence issues 177–9
 future of offsets 209–11
 postwar offset developments 188–95
 Japan-US technology transfer 9, 182, 187, 208–9, 247
 joint development and production 10, 313–6
 joint ventures 8, 222–3, 234–5, 240, 315, 409

Kanaris system: Greek upgrading agreement 11, 172
kokusanka 181–3
Korean Air 278
Kuwait 387

Leopard 1 MBT: Canadian programme 112–3, 115–6
 licensed production 3, 274
 Belgium 80
 benefits 330

INDEX

415

- licensed production (*cont*)
 definitions 2, 31–2
 European trends (1950–1990) 33–7
 France 147–8
 Japan 8–9, 187–8, 195–6, 206–7
 Saudi Arabia 227–8
 limits on offsets: by US 12–3, 363–4,
 368, 388, 391, 409–10
 liquidated damages 57, 384
Little Tigers *see* South Korea; Taiwan
 loans, financial 12
 local assembly agreements 147
 local content 6, 55, 64
 local-contracting 145–6
 local manufacturing 145–8
 local production: spin-offs 183–4
Lockheed: Peace Fox VI/Peace Marble
 IV competition 382, 392–4,
 396–405
 long-term strategy 409
- M113 Armoured Personnel Carrier:**
 Belgium programme 96–9
- McDonnell Douglas Corporation (MDC)**
 266–7, 391
 CF-18 Hornet 112–7
Peace Fox VI/Peace Marble IV
 competition 382, 392–4, 396–405
 see also F-18 aircraft
 maintenance sub-contracts 146
 Malaysia 141, 389–90
 management of programmes 87–8,
 307–9, 316, 323–4, 332–3
 manufactures: countertrade deals 26–30
 market entry 39
 Matra 140, 142–3
MDC *see* McDonnell Douglas
 Corporation
Meko-200 frigates: Greek programme
 11, 171–2
**Middle East Propulsion Company
 (MEPC)** 239–40
Mirage 2000 aircraft: Greek purchase
 agreement 11, 143, 168–70
- NATO**
 Code of Conduct 364, 409–10
 weapons standardisation policy 163–4
- Netherlands** 35–6, 146, 363
- European F-16 programme 2, 87, 89,
 91–5, 100, 139–40, 359
 offset requirements 353
Nigeria 142
 1990s: offset environment 386–92
 non-tariff barriers 232, 243
North Korea (DPRK) 246–8
Northrop Corporation
 F-5 aircraft 12, 322–9, 359–60
 F/A-18 aircraft 366–7
Norway 142–3, 390
 European F-16 programme 2, 87, 89,
 91–5, 100, 139–40, 359
 offset requirements 353
- OECD: competition conditions** 375
 off-the-shelf purchases 1
Office of Barter (US) 371
**Office of Management and Budget
 (OMB)**
 definitions of offsets 31–2
 offset reports 41–4, 360–1, 365–6,
 373
Offset Advisory Service 392
 offset credits 12, 39, 87, 234, 390,
 408–9
 offset executives 385
 oil offsets 142
 oligopolies 37–8
OMB *see* Office of Management and
 Budget
 opposition to offsets: US 366–7
 organisations, offset 155
 overcapacity 7, 90, 100
 overseas investment 32
- P-3 Aurora aircraft: Canadian agreement**
 112–3, 115–6
Pakistan 143
 payment, deferred 150–1
 payment conditions 150–1
Peace Alps programmes *see* F-5 aircraft
Peace Fox VI/Peace Marble IV
 competition 382, 392–4, 396–405
Peace Shield programme 8, 228, 230–2,
 236–40, 242
 penalties, financial 98, 408
People's Republic of China (PRC) 154,
 246–8, 261, 268

- petro-chemical offsets 142
 plants: supply and construction 22–4
 policies, offset 2
 political objectives 40, 153–4, 268–70
 Portugal: offset requirements 353
PRC *see* People's Republic of China
 price cutting 20–1, 30
 price discrimination 21, 30–1
 price reductions 151
 prior offsets 155
 product quality 22
 Project Deeds 54
 proliferation of arms 275, 367
 protectionism 39–40, 68–9, 85–6
 quality of product: and buy-back 22
 R&D: Japan 186–7
 raw materials: countertrade deals 26–7,
 30, 141, 390
 receivers of offset work 4–5
 reciprocal purchase deals *see*
 counterpurchase
 regional policies 6–7, 40, 88–91
 see also Canada
 regulation, governmental 386, 388, 391,
 409
 relationship between client
 nation/contractor 7, 383
 reliance on offset work 7, 86
 reporting requirements: US 360–2, 391
Republic of China (ROC) *see* Taiwan
Republic of Korea (ROK) *see* South
 Korea
 Rome Treaty: Article 223 101–2
 Russia 148, 269–71, 390
 Sammi Group 279
 Samsung Aerospace 277–8
 Saudi Arabia 5, 141–2, 151–2, **219–43**
 Al Sawary II programme 233
 Al Yamamah I and II programme 3,
 228, 233–6, 240–2
 development of the Kingdom 220–1
 joint ventures 222–3, 234–5, 240
 offset programme 8, 225, 228–9, 390
 offsets in the economy 242–3
 Peace Shield programme 8, 228,
 230–2, 235–40, 242
 Saudi Economic Offset Committee
 229–30
 Saudi-US Joint Economic Commission
 224–5
 technology transfer 149–50, 222,
 225–8
 Saudi Development and Training
 Company 240
 search costs: and countertrade 21
 second-best outcomes 38
 semi-direct offsets 84
 services offsets 2–3, 143
 Singapore 152
 size of programmes 310–11, 316, 383,
 386–8
 South Korea (Republic of Korea) 5, 9,
 195, **245–60, 268–79**
 defence industrial sector 249–56
 economic data 280–4
 role of offsets 256–60, 268–76
 Spain 5, 9–11, 35, 41, **299–317**
 F-18 programme 9–10, 299–311
 industrial agreements 313–16
 offset deals (1983–1993) 10, 144–7,
 152–3, 311–3
 offset requirements 353
 strategy, offset 385
 sub-contractor production 32–3, 42,
 146–7
 definitions 31–2
 success factors: countertrade 28–9
 surveys, UK
 exporters 342–7, 351–2
 importers 342–3, 347–52
 Sweden 142–3, 145, 148, 151–2
 switch traders 16
 Switzerland 4–5, 12, 41, 145, 149, 152,
 321–33
 F-5 programme 12, 322–9
 offset policy 329–33
 Taiwan 5, 9, 146, 148, 195, **245–8,**
 260–77
 defence industrial sector 262–5
 economic data 280–4
 role of offsets 265–9, 270–6
 Tate & Lyle 241
 technological diffusion 38, 199, 201,
 274, 374

- technology markets: information asymmetries 22–4
- technology transfer 38–9, 141, 390
definition 32
France 148–50
Saudi Arabia 222, 225–8, 243
South Korea 9, 247, 258, 274–5
Taiwan 9, 274–5
US 13, 374
US-Japan 9, 182, 187, 208–9, 247
- Thailand 148
- third-party companies 143, 390
- Thomson-CSF 140, 143, 146, 150–1, 233, 387
- time scales of programmes 54, 310, 409
- tourism offsets 11, 143, 173
- trade-related investment measures (TRIMs) 374
- Trading Offsets Association (AGECO) 155
- transaction costs: and countertrade 21
- transfer of technology *see* technology transfer
- TRIMs (trade-related investment measures) 374
- Turkey 41, 99, 146, 150–1, 153–4, 389
- United Arab Emirates (UAE) 142, 150, 388, 390–1
- United Kingdom (UK) 2, 4, 7–8, 35–6, 41, 151, 337–54, 389
Al Yamamah programmes 233–4, 242
AWACS programme 8, 338–48, 352, 387
exporters survey 342–7, 351–2
implication for policy 352–3
importers survey 342–3, 347–52
Offset Advisory Service 392
- United States of America (USA) 4, 68–9, 145–6, 357–75
assessment of offset policy 372–5
co-operative programmes and competition 204–9
downsizing of defence environment 389
- history of offset sales 12–3, 357–60
- Japanese co-production 9, 200–4
- Military Offsets Policy statement 279–80
- offsets policy (purchases) 371–2
- offsets policy (sales) 360–71, 391
- regulation of offsets 12–3, 363–4, 368, 388, 391, 409–10
- Saudi-US Joint Economic Commission 224–5
- state offset policies 372
- technology transfer 9, 13, 182, 187, 208–9, 247, 374
see also Office of Management and Budget
- USSR 148, 150
- value of countertrade deals 27
- volume of offsets 3–4
- weapons standardisation policy: NATO 163–4
- Westinghouse 11
- winding down of programmes: Australia 58
- work-sharing 3, 6, 185
see also co-production; licensed production
- World Trade Organization: competition conditions 375