Arms Trade Offsets

Introduction

- When countries procure defence equipment they have a number of options ranging from indigenous production to off the shelf purchase from a foreign supplier.
- Indigenous production often infeasible for major weapons systems and/or extremely expensive
- When procuring from a foreign supplier they can look to reduce the cost in a number of ways.

Introduction

- Become involved in the production and the development of the product:
  - joint production:
  - licensed production,
  - sub-contractor production;
  - foreign direct investment
  - technology transfer
- Each has different implications for costs, programme risks, control over specifications and wider industrial and economic benefits

Introduction

- Other methods of compensation such as countertrade, which may be civilian rather than military.
- All of these are lumped together under the concept of "offsets".
- The US Government definition is: 'industrial compensation practices required as a condition of purchase in either government-to-government or commercial sales of defence articles and/or defence services' –others may differ
- Countries often have different criteria
  - whether offset obligations are required
  - what types are acceptable

Introduction

- Offsets are an increasingly important part of the international trade in arms.
- In principle hold out great promise for developing and emerging economies an have become extremely common with deals
- They can spend their budgets on arms and yet also help their industrialisation and sell the arms purchasers to their citizens
- But shall see don't really live up to the hype

Offsets

- It is useful to distinguish between:
  - direct offsets, which includes goods and services for the equipment the purchaser is buying (parts of the weapon system is sourced from the purchaser)
  - indirect offsets, which includes goods and services unrelated to the specific equipment, and can include foreign investment and countertrade (barter counter purchase and buy back).
- It is also possible to agree to inward investment unrelated to the purchase of the goods. Such offset deals are an increasingly important part of the international trade in military equipment, especially in the aerospace industry

Offsets

- While offset policies vary among states there are some common characteristics.
  - that importers mandate offset requirements by law, often to 100 percent of the arms contract value,
  - that offset requirements kick in for minimum contract value, often as low as US$5 million,
  - that multipliers are frequently attached to offset deals,
  - that contracts have non-fulfilment of obligations penalty clauses
  - that offsets will reduce arms acquisition costs,
  - that job creation and generalized economic development will result
  - that new and sustainable work will result
  - that general and specific technology transfers will result

Economics of Offsets

- While official publications often herald offset agreements as beneficial to the purchasing country, the issue is much more complex
- Costs and benefits of such programmes have been the subject of some debate.
- Offset agreements are likely to be more of an attempt to justify foreign procurement, rather than an economic argument in support of the benefits of import replacement.

Economics of Offsets

- If there is a local defence industry then it is bound to be effected by the procurement orders going abroad,
- but evidence suggests that maintaining a local defence industry is expensive and uneconomic for a small country (Dunne, 1996).
- This means importing arms may be more sensible, especially as there is usually a premium attached to offsets, with the result that the purchase price is normally higher.

Economics of Offsets

- The welfare issues are unclear.
  - Offsets relocate production to the purchasing nation, which represents a trade diversion, which can be welfare reducing.
  - Imports can create wealth by allowing labour to be moved to more productive (competitive) areas of the economy.
  - On the other hand international markets are not competitive and offsets may improve efficiency if they remove non-tariff barriers and lead to a search for more efficient subcontractors.
  - Offsets may be considered as a subset of the myriad price-quality-quantity trade-offs, which characterise negotiations for large transactions.
  - Offsets may lead to reduced transaction costs (reducing the number of contracts per trade) but they may also inhibit the flexibility of negotiating advantageous deals and result in inefficient procurement

Economics of Offsets

- Competitive bidding leads companies to compete on offsets and to come up with some ingenious ways to deal with them. This sometimes leads to unrealistic offset agreements.
- The complexity of some agreements has led to the establishment of specialist agencies (e.g. Australia, Spain) within government to deal with offset programmes.
- This has helped both purchases and suppliers to overcome the problems of the past, but there still remain problems.
- It is possible that the supplier may plan to renege, building into the purchase price the cost of reneging (moral hazard).
- It is often unclear how much of the offsets is genuinely new work; what is the technical content; and which companies and regions will benefit from the offsets.
- In addition, defence offsets have often been linked with development aid (e.g. Pergau Dam).

Economics of Offsets

- Clearly the benefits of offsets to the procuring country are open to question and the only way of determining the true value of an offset arrangement to a country is to make a detailed analysis.
- When this has been done the impact on the economy has been much smaller than expected or promised (Matthews, 1996, Martin, 1996).
- For a small country the issue may be to maintain an intelligent customer capability (intelligent buyer) and to be able to maintain and upgrade systems rather than to retain a domestic production capability.
- This might be achieved through maintaining technological capabilities in research establishments and requiring technology transfers, rather than retaining a local defence industrial base.
- If there are to be defence offsets then they could be used for developing civil products and/or to assist with the conversion of defence companies rather than attempts to maintain local defence capabilities.
- Any other solution could be considered second best.

Offsets in Developing and Emerging Economies

- When an arms deal is agreed and offsets are negotiated developing countries can consider both defence and non –defence offset deals
- they may wish to export some agricultural products or other low tech civil good,
- or they may wish to develop or maintain a defence industrial base, develop into niche markets.
- This will clearly depend upon government

Developing Economies

- As Brauer (2003; Ch 5) discusses the nature of arms production varies across developing countries and the aspirations to be a member of the defence producing elite.
- The nature of arms production is complex ranging from simple maintenance activities to completely independent R&D and production (Krause, 1992).
- With most developing economies closer to the former and their motives for developing these capabilities ranging across the strategic, political and economic.

Developing Economies

- Arms importing countries' offset objectives do of course evolve over time and their strategies change as their objectives evolve. Countries:
  - have targeted certain arms niches and they structure arms import acquisition and offset demands toward the fulfilment of that goal (e.g., Singapore, Taiwan).
  - appear driven by regional power ambitions that need indigenous arms industry so pursue an arms sourcing and offset strategy with broad technology transfer requirements. (e.g., Brazil, India, Indonesia)
  - seek an ability to produce a wide spectrum of systems because of a desire and increasing ability to broadly participate in all industrial markets. (e.g., South Korea)
  - view arms offsets as an opportunity to revive a collapsed or failed indigenous arms industry (e.g., Poland).
  - view arms offsets as a way to simply get the arms and keep the money at home as well. (e.g., South Africa)

Effects

- Some countries have been clear that their primary purpose not general economic development but development of the indigenous arms industry, for example Japan, South Korea, Taiwan, and Poland.
- This is also true of Brazil where "offset policy and practice ... involving licensed production, coproduction, and technology transfer has been pursued not so much for direct economic benefit but to develop Brazil's arms industry to fulfill a certain view of its place in the world" (Perlo-Freeman, p. 199).
- As mentioned, countries that did harbour and pursue general economic development appear to have given up on this objective (e.g., the Nordic countries).
- Some countries still pursue this dream. These include Indonesia and South Africa.

Effects

- Have seen lot of clauses in contracts including penalties
- What is missing are offset contract monitoring, auditing, and feedback to the importing country's defense contract-issuing organization.
- Very few countries have ever carried out even a single formal and independent offset-contract audit to determine to what degree, if any, the hopes with which offset contracts are invested come to fruition.

Effects

- the expectation is that offsets will reduce arms procurement costs to the importing country; and certainly that there be no cost premium as compared to off-the-shelf arms purchases.
- But the administrative cost of offsets alone is believed to cost arms sellers anywhere from 7 to 10 percent of contract value (Markusen, p. 71), and this cost must be recovered in some form.
- Even if offsets result in higher total contract cost, it is true as politicians claim and as the news media repeat that general economic development is stimulated? The evidence is mixed, with the balance of evidence pointing to adverse experiences.

Effects

- Another criterion often expressed by officials is that offsets not merely replace work that would have been sourced in-country anyway and that it not be one-off but continuous work.
- Brauer argues that a minimum condition for successful indigenous arms production efforts is that existing civilian industry must already exist from which a state may branch out into military-related work
- With regard to general and specific technology transfer directed either toward military or civilian industry the record also is mixed for the advanced economies.
- For the developing and emerging economies it is more negative.

Effects

- Offset deals are sometimes considered successful in some country's own terms eg Brazil in aerospace ascended the technological ladder, producing a world-leader in the regional jet market (Embraer). (Perlo-Freeman, 2004)
- But achieved through massive government investment and subsidy and is nowhere near achieving independent arms production
- India, gained certain technologies successfully transferred, But failed to acquire capabilities sufficient to close the technology gap and keep pace with technological change (Baskaran, 2004).

Effects

- Taiwan's efforts to develop indigenous systems in the 1990s resulted in items that remained heavily dependent on imported technology and that not all programs were successful (Chinworth, 2004
- Singapore learned from the experience of the other countries, sticking to a core competencies/niche production business strategy. The available offset work is limited in scope but sustainable, even spilling into the non-defense sector.
- Has recently reduced its already low attachment to offsets as an industrial policy, and in the case of its participation in the U.S. JSF project the country explicitly rejected the idea of offsets (pp. 265-266). Bitzinger (2004)

Effects

- South Africa's defence deal was considered to be an extremely generous one, but the reality has not lived up to the hype
- The defence industry has gained from its offset deal
- Local firms have been integrated into an emerging European global arms production supply chain, but this might have happened anyway
- It would also appear to be at high cost and to have led to considerable corruption and governance problems.
- Non defence offsets have been a failure and were they have happened it is unclear whether South Africa getting state-of-the-art technology in areas of growth, or old technology in areas of overcapacity (Dunne and Lamb, 2004).

Conclusions

- Assuming that arms imports are in fact needed for legitimate defence purposes then cost and offsets become an issue.
- To date, the evidence does not suggest that offsets advance countries' long-term goals.
  - do not result in arms acquisition cost reductions,
  - do not stimulate broad-based civilian economic development,
  - neither substantial nor sustained job creation occurs,
  - almost no successful technology transfer into the civilian sector is observed,
  - only limited technology transfer into the military sector occurs, often over decades and at high cost and is quickly outpaced by continuous technology advances in the main developed countries, especially the United States.

Conclusions

- Clearly the benefits of offsets to the procuring country are open to question and the only way of determining the true value of an offset arrangement to a country is to make a detailed analysis.
- When this has been done the impact on the economy has been much smaller than expected or promised (Matthews, 1996, Martin, 1996).
- The onus to prove otherwise lies with those who would champion the case of offsets.
- Regrettably, their case relies on pre-offset assertions, rather than post-offset evidence.

Conclusion

- For small and developing countries the issue may be to maintain or develop an intelligent customer capability and to be able to maintain and upgrade systems rather than to retain a domestic production capability.
- Might be achieved through maintaining/developing technological capabilities in research establishments and requiring technology transfers, rather than retaining/developing a local defence industrial base.
- If there are to be defence offsets then they could be used for developing civil products and/or to assist with the conversion of defence companies rather than attempts to maintain local defence capabilities.
- Any other solution could be considered second best.