

**Background
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COSTS OF U.S. MIDDLE EAST POLICY:

AN ECONOMIC OVERVIEW

Dr. Thomas R. Stauffer

Washington, D.C.

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William S. Cohen Center for International Policy,

University of Maine

And

U. S. Army War College

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Abstract

Policy in the Middle East has been very costly to the US, as well as to the rest of world. The cost to the US of its policies in the region has accumulated to over \$ 2,500 billion, an amount greater than the cost of the Vietnam war.

About two-thirds of those costs – circa \$1,600 billion – arose from the US defense of Israel since 1973, the point in time at which crisis costs and aid programs began to escalate beyond any original expectations. Prior to 1973 the major cost was support for Turkey as part of Cold War operations to contain the Soviet Union.

Since 1973, however, protection of Israel and subsidies to countries such as Egypt and Jordan, willing to sign peace treaties with Israel, has been the prime driver of US outlays or the trigger for crisis costs. Rescue of Israel in 1973 by President Nixon cost the US almost \$900 billion in lost GDP, resulting from the Arab oil embargo, and higher oil import costs. The Gulf War, on the other hand, cost less than \$ 100 billion, in higher energy costs, because all of the other costs were hived off to allies through “burden-sharing”.

US jobs have also been affected. “Trade followed the flag” in the area. Worsening political relations resulted in the loss of hundreds of thousands

of US jobs. Some disappeared as a consequence of trade sanctions, some because large contracts were forfeited thanks to active domestic lobbies, and others thanks to a dangerously growing trade-aid imbalance vis-à-vis Israel.

Hundreds of billions additionally were spent on ‘Project Independence’, ostensibly to emancipate the US from reliance upon ME oil. The projects were largely co-opted by domestic lobbies of diverse colorations, and little imported oil was actually displaced.

Defense of the Gulf – often cited as a major factor -- has in fact been but a minor element of cost. Most of the equipment and troops and the operations of the carrier task force at Diego Garcia would be maintained in support of other geopolitical objectives, so those outlays are not substantively tied to US policies in the Gulf itself. The presence itself has entailed relatively modest incremental costs – of the order of \$ 2 billion (net) per year, exclusive of any new costs tied to the new mobilization against Iraq.

COSTS OF U.S. MIDDLE EAST POLICY:

AN ECONOMIC OVERVIEW [\[1\]](#)

Dr. Thomas R. Stauffer

Washington, D.C.

US policy in the ME is an expensive luxury for the US economy. The costs of the oil price crises alone in the Middle East have risen beyond any early expectations – the total through the mid-1990’s comes to more than one thousand billion dollars – i.e. rather more than one trillion dollars, as

measured in dollars of 2001. Additional identifiable costs bring the total to well over 2.5 trillion dollars, plus the loss of several hundred thousand jobs tied to the US export sectors. This overall estimate itself is still distinctly low because it leaves out several large costs which are elusively quantifiable:

1. All post “9/11” costs – direct damage, reaction costs such as enhanced security measures, and the “war on terrorism” -- are excluded because any such calculation is premature.
2. The costs of “Project Independence” are only illustrated; no overview has been possible. Those costs are directly tied to the ME since the objective of the autarkic compulsion in the US was to emancipate the US at least in part from dependence on ME oil.

Several components of these costs are known – and are sketched – but a total is not knowable, except for the fact that it is generally conceded that the massive expenditures had but little effect upon US oil import dependence.

The costs of US policies in the ME have arisen in many forms – some, like higher oil prices, affect consumers directly. Others, like the strategic stockpile of oil, are direct charges to the Federal budget. Still others are hidden in sub-accounts at the Department of Defense or camouflaged completely in the form of tax credits or hidden surcharges on electric power rates which are not directly identifiable as energy subsidies.

Most of the costs have been incurred since 1973. In that year the US had to rescue Israel from the Arab retaliatory attacks. President Nixon ordered

the resupply of Israel with US arms, which triggered the Arab oil embargo against the US. That was the point in time when the US had to assume to the burden of paying for protecting the territories which Israel had conquered in 1967. As the costs of regional conflicts increased, defending Israel became the largest single element in the cost burden. Rather more than three-quarters of the total definable costs – about \$ 1,250 billion – are directly linked to US support for Israel. But other costs are uncorrelated with US policy towards Israel or – at most – are loosely related to that policy. For example, the costs of the oil price crises in 1978 and in 1980, which added hundreds of billions of dollars to oil prices, resulted from the Iranian revolution and the subsequent war between Iran and Iraq. While the US and Israel were actively involved in supporting the belligerents, both crises arose only partly from US ties to Israel and US efforts to undercut threats to Israel.

1. Crisis Costs.

Middle East political crises have proved costly to the US. The last three political crises in the Middle East provoked sharp increases in oil prices, which bore heavily upon US consumers even though, at the time of the first such crisis in 1973, the level of US oil imports was relatively modest. Then, in 1973, two weeks into the Arabi-Israeli war, Arab exporters embargoed shipments of oil to the US, a tactic which proved unexpectedly effective, and the impact produced a double whammy. First, the oil shortages – some 2mmb/d at the peak of the embargo – forced a sharp retrenchment in US economic activity. The shortfall in oil deliveries cost the US some \$300 billion in current GDP (\$ 420 bn in 2001\$). Second,

compounding the recessionary effect, the crisis irreversibly increased oil prices. The price effect persisted until the mid-1980's, and that additional burden on the US due to higher oil prices induced in 1973 amounted to some \$ 450 bn .

The second crisis was actually two crises, back to back – first, the Iranian revolutionaries closed down the oil terminals, pulling about 5 mmb/d off the international oil market in late 1978. Two years later, after Iranian exports had begun to recover, war broke out between Iran and Iraq and oil exports from both countries were interrupted erratically over the next eight years. US import prices jumped from about \$ 14/b in 1978 to a peak of \$ 36 in 1981. Thereafter they sagged toward \$27 in 1985.

The first two oil price crises petered out by 1986. Prices fell sharply in 1986, as Saudi Arabia and Kuwait introduced a low-price, market share strategy. This dramatic new policy ended the price run up which had started in 1973 and accelerated after 1978. Nonetheless, the second set of crises cost the US \$ 350 bn in higher import prices. The total burden on US consumers was much larger – probably some \$900 bn -- because domestic oil and gas prices began to track import prices upward, in spite of price controls in which loopholes had been carefully crafted.

The third oil price crisis was short-lived, but nonetheless still moderately expensive for US consumers. After Iraq's occupation of Kuwait in August of 1990, exports from both countries were sanctioned, and oil prices rapidly shot up in late 1990, reaching a peak over \$ 35 towards the end of the year. The increase was then mitigated by increased production from

Saudi Arabia, primarily, which covered almost three-quarters of the shortfall, plus additional production from other Gulf producers. Kuwait production as well began to resume by early 1992. Thus the price spike was of shorter duration than had been feared.

Nonetheless, the total cost to US consumers was approximately \$80 bn, since domestic prices tracked international price rises almost immediately – and subsided just as quickly. The increased cost of imported oil was about half the total – between \$35 and 40 bn. The oil price effect dwarfed the cost of the war itself. The costs of US mobilization and combat were effectively zero – allies were dragooned or induced into covering all of the US direct costs, plus funding as well support for the “front-line” states, expenses which otherwise might have been borne by the US. The Gulf War was de facto a “freebie” with respect to the Federal budget.

There arose an additional element which added to the total costs of oil crises – the strategic oil stockpile. Responding primarily to Israeli fears about potential Arab political leverage – a real spectre in the wake of the successful embargo in 1973 -- the US undertook to establish a Strategic Petroleum Reserve (“SPR”). The objective was to stockpile enough oil to eliminate or mitigate political pressures from any possible future embargo. The budgeted cost of the SPR is officially some \$ 22 bn, for the oil fill and facilities. But the economic cost of the SPR to date is very much greater. Corrected for inflation, and including an allowance for the minimum return on capital recommended by the Office of Management and Budget (“OMB”), the actual economic cost has accumulated to over \$ 130 billion in 2001\$. A major factor in the high cost is the fact that the

US DOE bought oil for the SPR at peak prices in the late 1970's and early 1980's -- \$40-65 per barrel in today's dollars. The salvage values of the oil and facilities are relatively low, but have been deducted in determining the net cost of the program. Nonetheless, \$130 bn understates the actual cost, which is perhaps at least \$ 10 billion greater because more of the expenditures in recent years are off-budget and not reported.

A minimum estimate for the costs of the three oil crises since 1973, including the SPR as a prophylactic adjunct, comes to \$ 1,439 billion:

1973 Embargo	\$875 bn
Strategic Petroleum Reserve	134 bn
1978-1980: Iranian Revolution	350 bn
and Iran-Iraq War	
1990/91 Gulf War	80 bn
Total Estimate	\$ 1,439 bn

Thus the three oil crises alone have cost the US at least \$ 1.5 trillion (2001\$) since 1973.

2. Economic and Military Aid (Budgeted)

The US has also disbursed massive amounts of aid into the region, largely in the form of grants, or non-repayable loans or loan guarantees. Some of the aid was tied to Cold War support for Turkey, but most of the sums

have been spent since 1973, much of it tied to support for Israel's post-1967 territorial expansions.

Total budgeted aid to the Near East and Turkey [\[2\]](#) since 1946 amounts to \$ 640 billion, again adjusted for inflation and including a 3% opportunity cost for US capital. Of the budgeted total \$406 bn (2001\$) arose since 1973. Major beneficiaries have been:

Israel	\$ 240 bn
Egypt	\$ 117 bn
Jordan	\$ 22 bn
Turkey \$	\$ 139 bn
Partial total	\$ 518 bn

This total omits items such as peacekeeping expenses, special aid to the Sudan, and items such as US contributions to multilateral aid or rescue programs such as the \$17 bn package for Turkey after its alliance with Israel.

Of that partial total for official, budgeted aid, \$ 379 bn is support for Israel, direct and derivative. The aid to Egypt and Jordan is supplementary support for Israel. Those aid disbursements originated with the peace treaties signed by both with Israel and are viewed locally as payments to both for their reduced threat to Israel, a consideration which is also reflected in Congressional discussions of the appropriations each

year. Consequently, politically, if not administratively, those outlays are part of the total package of support for Israel.

3. Special and ad hoc aid

Two further elements are to be noted. First, Jewish charities and organizations in the US remit grants, or purchase Israel Bonds, a net amount which is roughly estimated at \$50-60 bn over the period. Although these sums are private in origin, they are US-source monies which are channeled to Israel and are net drains on the US economy. Second, in addition to the budgeted amounts included within the annual foreign aid appropriation bill, Israel has received sizable amounts of ad hoc aid which do not appear as line items in the foreign aid legislation. No comprehensive overview has been found, but we list below a number of outlays which themselves add up to a material increase over the budgeted aid:

a. Loan guarantees (1992-98).

The US has guaranteed full performance on \$ 10 billion in commercial loans undertaken by Israel. Those loans would not have been possible without the US guarantee, given Israel precarious economy and unfavorable and persistent balance of payments deficits. Just as the US had forgiven earlier loans to Israel, in view of the precedents and Israel's faltering economy, it is all but certain that the US Treasury will be required to make good on these guarantees. At least one other block of guarantees is known – some \$600-plus million for 'housing loans', which still others are bruited but undocumented.

b. Lavi fighter and Arrow missile projects

Israel has received approximately \$ 2.5 billion in direct support for these two military design and manufacturing projects. The Lavi fighter project was finally discontinued, but occasional funding for the Arrow project may still be continuing.

c. Oil Supply Guarantee: Contingency Cost

The US has guaranteed oil supply to Israel – a guarantee to be implemented even in scenarios where US consumers are embargoed. If necessary, the US must divert oil from the US during a possible embargo to ensure that Israel would receive at least 93% of its requirements. The agreement was signed by Secretary Kissinger in 1975 and has been renewed discretely since then. The language of the agreements is murky, but as interpreted Israel will receive oil even if US consumers must receive less.

The worst case scenario – total cut off to Israel and major interruption of supplies to the US – is politically the relevant contingency. The possible cost is very high. The cost to the US is not the price of the oil itself, which Israel theoretically is obligated to pay. Rather, the economic cost to the US is the additional reduction in the GDP if a further 200,000 b/d of oil were to be diverted from scarce US supply to satisfy Israeli demands.

The guarantee is potentially extraordinarily costly, if invoked. An illustrative crisis scenario would require the US to shift some 200,000 b/d

from US supplies to Israel. The economic burden upon the US would be some \$ 600-900 million per month in lost GDP -- more if the embargo against the US at the same time were so severe so that oil shortages would cascade through the US economy. We note that oil shortages today are more costly than hitherto, because the opportunities for fuel-switching are all but nil.

d. Prepositioned arms and Excess Defense Articles

The US has “prepositioned” significant amounts of equipment and expendables, such as ordnance, in Israel. Notionally, these materials are stockpiled for delivery to US forces in the area, but it is expected that the Israelis would use the material themselves. It is understood that these equipments are not included within Centcom’s logistic planning, since they are not presumed to be at the disposition of US forces.

Further, Israel benefits regularly from discounted sales of serviceable US equipment (“Excess Defense Articles”), sold at prices well below commercial levels. The subsidy is the amount by which the items are underpriced, a discount which is negotiated case by case. Department of Defense officials with very close ties to the Israeli establishment have generally been responsible for setting the prices and determining which items are “surplus” and available for delivery to Israel.

Informal estimates put these discounts at several billion dollars over recent years, but a comprehensive reckoning has not been found in the public record, and the Department of Defense is loath to provide an accounting.

(e) ‘Offsets’ and weapons technology

Preferential and concessional treatment of arms contracts is another form of aid to the Middle East. Hitherto the principal beneficiary has been Israel, but the issue is becoming increasingly important with respect to both Egypt and Turkey. The pros and cons of ‘offsets’ in military procurement contracts have been extensively debated. ‘Offsets’ take many forms: 1) local production of part of the system; 2) the foreign vendor buys other equipment from the client for his own production elsewhere; 3) the vendor brokers local equipment to third parties; or 4) the vendor and local firms co-produce and sell to third countries. Other combinations are known. The direct impact is that a given deal means fewer jobs in the source country and more jobs in the buyer’s industries, quite aside from any technology or manufacturing know-how which may also be transferred.

We focus here on the impact of such agreements in the special cases of countries which do not pay for the weapons procured from the US. De facto ‘gifts’ of armaments are indeed common in the ME, but rare elsewhere. In the case of the Middle East it is necessary to distinguish two distinctly different sub-cases:

Paying clients

In the case of clients who pay for arms purchases, there exists a competitive market with usually more than two sellers. Offset agreements, or co-production arrangements, are part of the sales packages negotiated in the competition for such contracts, just as are financing

terms, price, or conditions of infrastructural support.

Offsets and mandatory buybacks are unwelcome, but are a real part of the international competition for the sale of weapons systems and support to paying customers. Where the arms are paid for, offsets are not subsidies or aid.

Stipendiary states

The situation is radically different in the cases where US arms exports are financed overtly or covertly by grants, i.e. where the recipient stipendiary does not actually pay for the equipment.

There is no competition for free weapons – inducements do not need to be offered to stipendiaries to accept weapons for which they do not need to pay. Thus the offsets demanded by the Israelis, or given to the Egyptians, are subsidies, not market incentives.

Israel. Israel receives some \$1.8 bn per year in direct, cash grants from the US, ostensibly earmarked for purchases of US weapons. Additional amounts are granted from time to time for special projects. The terms of these grants have several adverse effects upon the viability of the US defense industry and upon US employment:

Israel is allowed to spend roughly 40% of the grant money directly for its own hardware, bypassing US suppliers completely.

Israel has successfully demanded that the US buy equipment or subsystems from Israel just as if the deliveries were paid for. Thus the US DoD or US contractors must one way or another buy from Israel, paying in real money, some 50-60 cents worth of goods for every dollar's worth which the US gives to Israel – a financial double whammy.

Israeli arms merchants, such as IAI or Raphael, are able to embody USA technology in equipment which they sell to 3rd parties, often to pariah states or to countries subject to arms embargoes where they are able to command high praemia for the US-derived equipment. In the 1980's, for example, when Israel sold large amounts of armaments to Iran, in violation of the embargoes, the Iranians complained vociferously that the Israelis charged two to four times the prevailing prices.

The agreements have proliferated and are little publicized. Some are large, such as those involving the F-16, but smaller arrangements, such as those with General Dynamics or Textron, have proliferated and sum to appreciable amounts. The package of special terms has been very profitable to Israel, although no reliable estimate of the annual extra profits has been located in the public domain. The Congressional Research Service notes that weapons systems and subsystems make up almost half of Israel manufactured exports, which is due in considerable part to the package of subsidies, financial and technical, from the US. Occasionally, the US has blocked such sales – the Phalcon system to China or Kfir jets to Ecuador, but in spite of such rare interventions, the trade is important and profitable, even if quantification is elusive.

Egypt. The major offset deal is co-production in Egypt of the MA1A battle tank. The amount is relatively small, but it illustrates the costly feature, increasingly common, that Egypt is reportedly trying to sell its co-produced tanks to 3rd parties, directly competing with the US.

4. Lost trade and US jobs

US trade with the Middle East is a relatively small fraction of total US

trade, but nonetheless several million jobs are at stake. The pattern of US trade with the region is idiosyncratic because customers vary greatly in their ability or willingness to trade or pay. Three categories can be identified:

- v Paying customers

Countries such as Saudi Arabia still buy preferentially from the US and pay for what they import.

- v Non-customers

Political hostility has all but eliminated the US from certain markets, resulting in loss of trade and export-related jobs.

- v Stipendiary buyers

Countries such as Israel, Egypt, and Jordan receive large amounts of aid and – especially in the case of Israel – pay little or nothing for imports from the US.

We examine the trade losses connected with the second and third categories – the non-customers AND the stipendiaries.

- (a) Embargoes and sanctions

A major cost to the US has been employment lost through trade policy in the Middle East, especially as a result of sanctions and embargoes. The impact of the sanctions and poor diplomatic relations with four key countries – Iran, Iraq, Libya, and Syria can be measured most readily. A

useful measure of the lost trade is the difference between the actual share of these four countries' imports from the US and the expected share – “expected” in the sense of the market share captured by the US elsewhere in the developing countries. The US' share in the imports of these countries fluctuates between zero and 3-4%. This signifies a considerable loss in trade and in export jobs, since the US otherwise enjoys on average about 16-18% of the import market of third world countries.

The lost trade in recent years has averaged \$ 5 bn per year, including estimated losses in conventional exports of services over and above the recorded losses in exports of agricultural or manufactured goods. Trade is closely correlated with politics. The dramatic effect of political alienation can be illustrated by the marked turndown in US trade with Iran turned down directly after the revolution. In the mid-1970's, as Iran's income was expanding, Iran imported almost 25 % of its non-military goods from the US. After 1978/9 that figure sputtered between 0 and 5% per year; Figure One shows clearly how “trade follows the flag”, except in the opposite sense as intended by Cecil Rhodes when he argued for further British expansions into Africa:



This set of US policies has cost 70-80,000 jobs. About half of the jobs are lost in the export firms themselves, scattered throughout the US, and the other half are lost indirectly in those industries which supply export firms. Two further factors have affected the balance of job losses – one positively and one negatively. An additional source of lost exports jobs is the absence of US producers from the agricultural trade. Both Iran and Iraq are potentially large and growing markets for US agricultural exports, particularly wheat, corn, and rice where the US export advantage is significant. The \$2-4 billion agricultural market is not reflected in the above figures, and the actual job loss is 10-25,000 higher – most of which are concentrated in the Middle Western farm states. On the other hand, positively, part of Iraq's oil revenues have in effect been shifted to Saudi Arabia, which imports proportionately more from the US. This shift has partly offset the jobs lost from the lack of direct trade with Iraq, but will decline in such measure as Iraq regains its former OPEC export quota.

(b) Trade-aid imbalance: Israel

A second material loss in US jobs results from a curious asymmetry in US trade with Israel. The US subsidizes Israel with some \$ 4-plus billion per year in direct aid (public and private), yet Israel imports disproportionately little from the US. To the contrary, it runs a strong trade surplus with the US, while sustaining a trade deficit vis-à-vis the European Community. In other words, US aid to Israel effectively finances Israeli imports from the EC. The effect is exacerbated by the fact that Israel does not pay for what it imports from the US, so that the aid-trade imbalance is even more unfavorable to the US.

In the year 2000 the trade imbalance (exclusive of aid) was more than \$ 5 billion in Israel's favor and against the US. Israel imported \$6.6 bn in goods from the US, but aid covered some \$ 4-4.5 bn of that volume of trade, so that Israel actually paid for only about \$ 2 bn in goods from the US. Since the US paid almost \$12 billion for imports from Israel, the net imbalance against the US was more than \$ 9 billion. Another 100,000-plus man-years were lost in connexion with the loan guarantees discussed earlier, but are not included in aid-trade imbalance calculation.

This policy alone costs the US another 125,000 jobs per year. The disparity has been increasing in recent years. In 1994 the aid-trade imbalance was about \$5 billion; it has almost doubled since then. The usual explanation is that the Free Trade Agreement between the US and Israel, negotiated in the mid-1980's, permits free Israel access to US markets, while Israel is still able to tax or otherwise restrict US goods. The EU, on the other hand, where there is no significant Israeli lobbying activity, has been able to protect itself against such discrimination and

therefore is able to maintain a trade surplus.

A similar effect is observed in the case of Egypt – it, too, imports from the US less than would be indicated by the levels of US aid. The effect however is numerically rather small, and it may indeed be offset in reality by the fact that much of US aid to Egypt consists of fees paid to US consultants. Such return flows are not reflected in the trade statistics, so that the job loss in the case of Egypt may be numerically negligible.

© Blocked trade

Further trade losses have resulted from large deals, over and above the routine trade patterns, which were blocked politically and thus lost to US suppliers. Several instances have been well-documented. One was a very large arms sale to Saudi Arabia which was lost in the mid-1980's because the Reagan administration was unable to resist pressures from the Israeli lobby. The Saudis wanted to purchase – and pay for – a large contingent of F-15 fighter aircraft, together with the related support, training, and maintenance services. The contract, including anticipated renewals and supplements, was estimated to have aggregated some \$40 billion over a ten-year period.

Israeli opposition prevailed, the US could not sign the contracts, and the UK firm, British Aerospace ('BAe') won the contract, offering what the Saudis believed to be lower-quality aircraft. The multi-billion dollar package came to be known as the 'Yamamah Project'. The Saudis negotiated a quasi-barter deal with the UK, whereby certain volumes of oil production were dedicated specifically to pay the British suppliers, an

arrangement which caused occasional contretemps as oil prices fluctuated. Nonetheless, the project proceeded, evolving somewhat as specifications changed, and has proved critically lucrative to BAE and the British aerospace and military industries.

The cost to the US aerospace industry and its suppliers was considerable. Approximately 800,000 man-years of employment were lost. But a further unintended consequence has been the fact that US defense manufacturing capability was also reduced – production lines might have been extended but were not. Collaterally, subcontractors were obligated to retrench, a familiar phenomenon when major extensions of existing production lines are not realized.

A second major loss occurred in Libya. There, too, the US was forced, again largely due to Israeli pressure exerted via Senator d'Amato, to abandon participation in a large project in Libya. This entailed designing and constructing the massive irrigation system known theatrically as the 'Great Man-Made River'. The project consisted of two dual water pipelines running from the central Libyan Sahara to supply municipal and agricultural water on the Mediterranean coast. In this instance, Senator d'Amato of New York served as the point man for the Israeli lobby in quashing US involvement. It involved fabricating and laying 4,000 kilometers of 4-meter diameter pipe of a type which hitherto had been manufactured primarily in the US. The entire operation was transferred to the UK, which rejoiced in the boost to its engineering industry. The US lost the design and engineering work, the supervisory work in the field (construction itself was subcontracted to Ah Dong, a Korean firm

connected to its military industry), and several billion dollars in sales of heavy-duty construction equipment. Instead of Caterpillar and other US hardware, the vehicle park became windfalls for Korean and Japanese firms such as Komatsu and Daewoo. The job loss in this case can be only roughly estimated but came to more than 25,000 man years.

(d) Incremental arms sales

One policy did produce tangible economic benefits – the close relations to the southern Gulf states, especially Saudi Arabia. That region has been a major market for the US armaments industry, thanks to an active export promotion policy. These exports differ from commercial exports in that the political motivation and correlations are explicit. This part of US trade with the region is incremental and policy-driven. That being said, it is important to note that arms exports fall into two categories:

Paying Customers:

Saudi Arabia, Kuwait, and the United Arab Emirates. These three major customers usually pay the equivalent of cash, sometimes have made advance payments on new systems, and therefore such sales represent net gains to the US economy.

Stipendiary states:

These are the oftakers of US military equipment which either do not pay at all – Israel and Egypt – or which receive concessional financing and may indeed ultimately be granted forgiveness of the military loans, the case of Turkey.

The three paying customers have contributed significantly to the US trade balance since the mid-1970's, when such sales began to become important, growing pari passu with increased oil revenues and intensified regional hostilities. Between 1990 and 2000 the three clients purchased \$ 43 bn in US equipment or financed military construction contracts:

Weapons Sales and Export Jobs:

M.E. Paying Customers

Sales (\$ bn) Jobs (man-years)

Saudi Arabia	\$ 35.1	490,000
Kuwait	5.6	78,000
U. A. E.	1.6	22,000

Incomplete data suggests that they purchased comparable volumes in the period 1980-1989, so that the incremental employment impact is probably close to double the figures tabulated above. The Gulf states have begun to require "offsets" for such contracts. However, the offsets requirement is inflated by a "multiplier", so that the actual net effect is often only a small fraction of the contract value.

5. Energy Autarky: Project Independence

Another major source of expense was the search for 'Energy Independence'. Imports of oil from the Middle East were suddenly recognized as insecure, and the US responded over time with a broad-

spectrum effort to develop alternative sources of energy. The shock of the Arab oil embargo of 1973, and the recognition that Israel was exposed to the Arab oil weapon, galvanized massive and manifold efforts to subsidize domestic or non-ME sources of energy.

Thus, subsidies for non-Gulf energy sources became an integral part of US policy towards the Middle East. The costs proved to be larger than originally envisaged, while the results – in terms of reducing oil imports from the ME – proved to be disappointingly meager. An overview of Project Independence has not been located, but anecdotal evidence illustrates both the magnitude of the costs and types of failures experienced as the ‘Project’ was increasingly preempted by industry lobbies who were able to use the rationale of energy security to create valuable subsidies for their own enterprises.

(a) Gasohol

A prominently expensive program designed to increase energy independence is the set of subsidies for gasohol. This is a mixture containing 90% oil-derived motor fuel and 10% ethanol (ethyl alcohol), which in the US is produced from corn. This program, enthusiastically received in the corn-growing states, resulted from the joint efforts of the Israeli lobby, some of the self-styled environmentalist groups, and the Archer Daniels Midlands Corporation (‘ADM’). ADM is the largest single manufacturer of fuel-grade ethanol and a major contributor to campaign war chests of both parties. More recently, justification for expanding the subsidy program – quintupling the target to 5 billion gallons

per year – has been based upon the role of ethanol additives in reducing certain automotive emissions.

Ethanol is indeed renewable and it is unequivocally ‘home-grown’. [\[3\]](#) The drawback is its very high cost, which requires commensurately high subsidies. The target was 1 billion gallons per year of gasohol – equivalent to new production of about 100 million gallons per year of ethanol, an objective which was indeed achieved. Current production is close to 1.5 billion gallons per year. The two largest elements of subsidy have been exemptions from Federal and local (state) taxes on gasohol fuel. The Federal exemption most recently has been 5.3 cents per gallon. But, since gasohol contains only 10% ethanol, the subsidy for the ethanol itself came to \$0.53 per gallon. Ethanol has only two-thirds the energy value of gasoline, so the Federal tax exemption equates to a subsidy of about \$33 per barrel of oil equivalent. Corn-producing states typically also exempt gasohol, so that the joint subsidy has exceeded \$50 per barrel of oil equivalent (more in the earliest years). Investment tax credits and other incentives also added to the subsidy, but an overview is not available.

The total subsidy per barrel is very large – more than twice the average price of a barrel of oil. Currently, based upon production of 1.5 billion gals/year, the minimum estimate of the total annual subsidy is about \$ 1 billion per year. The cumulative subsidy since inception probably exceeds \$25 billion. Since production of ethanol is energy-intensive, and since equivalents can be manufactured from domestic natural gas, the effect of the program in reducing oil imports has been minimal.

(b) “Unconventional natural gas”

Another subsidy evolved in order to encourage production of marginal domestic gas reserves, especially those in formations where gas wells flowed at uneconomically low rates (“tight” gas reservoirs or gas extracted from coal seams). [\[4\]](#) The subsidy, disbursed as a tax credit, is large in relation to average wellhead prices for gas – approximately \$1.25 per thousand cubic feet (“mcf”) as compared with annualized wellhead prices ranging between \$1 and \$3.

This subproject of Project Independence has been technically successful, but economically and strategically dubious. Much of the new gas in the US is produced from such submarginal fields, thanks to the subsidy. The annual cost has now surpassed the billion dollar a year mark. This is a deadweight cost to the economy, because the subsidy encourages genuinely higher cost production.

The impact upon imported oil is all but nil. Incremental gas in the US either competes with “secure” gas imports from Canada or substitutes for domestic coal. Since little oil is used to generate power, new gas does not substitute for oil, imported or domestic, except under rare, special circumstances. Hence, the \$20-plus billion spent on these subsidies (tax credits) have contributed naught to enhanced energy security.

(c) Government R&D expenditures

for high-cost energy sources

Another large component of energy independence costs has been the extensive support, both at Federal and state level, for “unconventional”, non-oil sources of energy. The budget also includes subsidies for high-cost oil – “enhanced oil recovery” projects. The total reported subsidies by the Federal government for sources such as solar or wind energy, but excluding outlays for nuclear power, has averaged some \$ 5-6,000 million per year since the 1980’s. That is only part of the support for non-economic energy. The published figures are misleading because of biases in both direction. The data omit large subsidies which are not juridically classified as such (understatement), but do include tax incentives, such as accelerated depreciation, which apply to all industries and are not specific to energy (overstatement). DOE/EIA published two studies purporting to reconcile total expenditures – we estimate here that the likely level is at least \$5 billion per year, excluding nuclear or fusion research programs. However, this estimate is at best provisional and illustrative. The twenty-year total, only approximately corrected for inflation and shifting programs, and without any allowance for interest, comes to \$ 100 bn. The real total cost of all programs characterized as part Project Independence, federal and state, plus those which are off-budget, is certainly very much higher – but, it must be repeated, only some of the projects had any impact upon oil imports.

(d) Electric rate “subsidies”

A very large block of incentives for renewable energy has been hidden in the structure of electricity rates charged by regulated utilities. States, especially California, have offered subsidies of their own, usually covertly

by requiring regulated electric power companies to buy such power at rates well above market levels. For example, the subsidy for wind-generated electricity is an extra price surcharge of 1.5 cents per kilowatt-hour, plus possible state subsidies in addition. This sounds small, but is equivalent to almost \$20 per barrel of oil equivalent, to which must be added a remarkable array of other tax credits and special power rates.

This program, too, added little to energy security, because subsidized wind power or solar electricity has typically substituted for domestic coal or imported Canadian gas, just as has been the case with the “tight gas” program. The subsidies created bonanzas for a handful of quick-footed entrepreneurs, but savings in oil imports have been negligible, since the plants displaced very little oil.

(e) Overall assessment

Tens of billions in subsidies were indeed disbursed ostensibly to substitute for imported, insecure oil from the Middle East. The examples above are illustrative, not comprehensive, but three of the illustrative examples aggregate to a subsidy figure of at least \$50 billion. Several common features have been pervasive:

- v “Energy Security” quickly became the rationale or cover for entrepreneurial opportunism. The programs were coopted by domestic lobbies.
- v Programs increasingly contributed little to reducing oil imports.

v Costs were in most cases hidden from consumers through the device of tax credits or “rolled-in” pricing of high-cost supplies.

v

Some programs – such as the mandated improvement in automobile gasoline mileage (“CAFE”) – did produce real savings in fuel consumption and therefore did reduce oil imports, but it is argued that costs of the more complex engines and construction more than outweighed the costs of fuel which were saved. Subsidized weatherization of homes also saved energy – largely gas or coal – and fuel cost savings did offset in part the very high costs, but, again, little reduction in oil imports was in fact realized.

A bare minimum estimate of budgeted Federal subsidies, but excluding hidden subsidies or mandated regulations affecting energy use or consumption, can be derived from DOE/EIA reports and comes to a bare-bones figure of \$ 100 bn.

6. ‘Defense of Gulf Oil’

‘Protecting’ Gulf oil supply and suppliers is often mentioned as a major cost to the US taxpayer. Quasi-journalistic sources have claimed that the real cost to the US of a barrel of oil from the Gulf is \$90 or more, once the costs of military support are reckoned in. [\[5\]](#) Identification and quantification of these costs raise a number of conceptual and definitional issues:

Does the US presence secure that oil – or, quite to the contrary, does that presence increase the risk of conflict or interruption of supply?

What fraction of any such costs are still borne, overtly or covertly, by local states, especially Saudi Arabia?

Which of the operations would be carried out quite independently of current threats or perceived risks to oil supplies?

A published estimate for the cost of operations in Southwest Asia from DOD sources is available for the period 1980-1990. The Department of Defense calculated that \$27.2 bn (\$ 40.8 bn 2001\$) had been spent during that decade to maintain the US military presence in the region. DoD added that a further \$273 bn (\$407 bn in 2001\$) had been expended in support of that presence.

The GAO report, which reviewed these claims, scaled down the estimates considerably. [\[6\]](#) First, of the \$27.2 bn, about two-thirds represented the cost of maintaining the carrier task force based out of Diego Garcia. GAO noted clearly that this mission would have been supported for other geopolitical reasons in any event, and indicated that at least \$16 bn of the reported outlays were in fact not specific to the Middle East. Second, the much larger figure of \$273 bn also represents programs or activities which were not specific to Southwest Asia or the Gulf – these represent equipment or readiness costs for resources would “could have been available” to CENTCOM in even of need. Only a fraction might be attributable to incremental needs to protect the Gulf. We estimate the net figures at \$ 2 bn (2001\$) per annum, absent better data.

More recently only anecdotal costs have been cited, ranging typically

between \$35 and 50 billion per year. These figures, too, are suspect. The total defense budget lies between \$350 and 400 bn. If credence is given to the claims of \$35-50 bn, that implies that the relatively modest ongoing operations in the Gulf consume ten percent or more of the total annual defense expenditure. This is implausible, given the force levels in the area – some 20,000 personnel -- and given the fact that, as before, many of the outlays are not incremental – i.e. the troop levels would have been maintained in any case, but garrisoned elsewhere, just as the base at Diego Garcia – while critical for future gulf actions, still serves other strategic objectives which would justify its status anyway.

The current level of expenditure for the Gulf is therefore a “guestimate” – absent better information we report a figure for the incremental costs of \$ 2 billion per year, discounting heavily the claims for larger figures where the burden of proof must be reversed. This figure, however, does not include any new costs associated with the build-up for the possible attack on Iraq.

7. Summary

Policy in the Middle East has been very costly to the US, as well as to the rest of world. The cost of US policies in the region has accumulated to over \$ 2,500 billion – measured in dollars of the year 2001 -- an amount greater than the cost of the Vietnam war. See Table for an approximate breakdown. This figure underestimates the costs because certain classes of expenditure have been left unquantified. In particular, no reliable figure is available for the costs of ‘Project Independence’, the US’ effort to

reduce dependence upon oil from the Middle East. That effort, which was subverted early on by diverse local special interests, may easily have cost \$1,000 billion itself – but, even though the outlays were justified in the interest of “national security”, they contributed little or nothing to reducing US strategic dependence upon imported oil.

Table Two

Overview of Estimated Cost to US:

ME Policies since World War II[\[7\]](#)

(2001\$ or jobs per year)

Type of Cost	Events	Costs 2001\$
Political or Military Crises		
	1973 War	\$ 875 bn
	Strategic Petroleum Reserve	\$ 134 bn
	1978 Iranian Revolution and Iran-Iraq War	\$ 350 bn
	Gulf War 1990-91	\$ 80 bn

Economic and Military Aid		
	Total Regional (budgeted)	\$ 640 bn
	Support for Israel (budgeted)	\$ 570 bn
	Ad hoc support for Israel	indeterminate
Lost Trade and Domestic Jobs		
	Embargoes and Sanctions	70-80,000 jobs
	Trade-aid imbalance: Israel	125,000 jobs
	<i>Incremental arms sales (Gulf) + 60,000 jobs</i>	
Energy autarky		
	"Project Independence"	indeterminate
"Defense" of Gulf Oil Supplies		
	Presence and preparedness in the Gulf	\$ 40+ bn

Total identifiable costs come to \$ 2,600 billion; the components are displayed in Table Two. About sixty percent, well over half, of those

costs – circa \$1,700 billion – arose from the US defense of Israel since 1973. The several earlier ME oil crises, in 1956 and 1967, had had little effect on the US, and the burden of aid to Israel was modest. Prior to 1973 the major cost was support for Turkey as part of Cold War operations to contain the Soviet Union. However, starting with the Arab-Israeli war of 1973, the costs to the US of regional crises costs and aid programs began to escalate beyond any original expectations.

Since 1973, however, protection of Israel and subsidies to countries such as Egypt and Jordan, willing to sign peace treaties with Israel, has been the prime driver of US outlays or the trigger for crisis costs. The cost of the oil crises accounted for 40% of the total; see Table Two. That in 1973 cost \$ 875 billion, which is the price tag for the rescue of Israel when President Nixon agreed to resupply Israeli with US arms as it was losing the war against its neighbors. US intervention triggered the Arab oil embargo which cost the US doubly -- about \$420 billion in lost GDP, due to the oil shortfall, and another \$450 billion in higher oil import costs. The next round was less dear. The Iranian revolution and the subsequent Iran-Iraq war cost the US \$350 billion in terms of higher oil import prices, whereas the Gulf War, on the other hand, was almost a bargain. It cost US consumers approximately \$ 80 billion, in higher energy prices. But the costs of the war itself were all but nil, because virtually all of the other costs were hived off on to our willing or reluctant allies through ‘burden-sharing’.

Support for Israel, excluding crisis costs, has amounted to \$570. This figure includes US budgeted aid for Egypt and Jordan, since that flow of

aid is so closely correlated with their postures towards Israel – that aid is part of the cost of buying peace for Israel on two of its borders. It also includes the flow of dollars from private Jews or Jewish organizations in the US to Israel, which are drains on the US balance of payments analogous to official aid transfers. A growing part of US aid to Israel is off-budget, examples being loan guarantees and extensive support for Israeli weapons industries. That aid is “indeterminate” because little is publicized and quantification is difficult, but rough estimates indicate several tens of billions of dollars at the least. This figure excludes the very high costs – potentially hundreds of billions of dollars -- if the US were forced to implement the oil supply guarantee with Israel, since that oil would have to be diverted from US consumers. None of the latter costs are reflected in Table Two.

US jobs have also been affected. “Trade followed the flag” in the area – but in the reverse direction. As relations deteriorated, trade was lost. Worsening political relations resulted in the loss of hundreds of thousands of US jobs. Some disappeared as a consequence of trade sanctions, some because large contracts were forfeited thanks to active domestic lobbies, and others thanks to a dangerously growing trade-aid imbalance vis-à-vis Israel.

The trickle of US trade with Iran, Iraq, Libya and Syria, compared with what would have been expected had relations been “normal”, let alone “good”, costs the US currently some 80-100,000 jobs each year. But “good” relations do not necessarily mean gains in employment – the striking trade-aid imbalance vis-à-vis Israel costs the US almost as many jobs as the sanction regimes. Israel buys little from the US in relation to

US aid levels, and the imbalance costs about 125,000 jobs per year. One aspect of policy, however, does create US jobs – the Gulf states incrementally buy large quantities of US arms and related services. That relationship, primarily with Saudi Arabia, has translated into an extra 60,000 jobs in recent years.

‘Defense’ of the Gulf – often cited as a major cost factor -- has in fact been but a minor element of cost. Most of the equipment and troops and the operations of the carrier task force at Diego Garcia would be maintained in support of other geopolitical objectives, so those outlays are not substantively tied to US policies in the Gulf itself. The U.S. presence itself has entailed relatively modest incremental costs – of the order of \$ 2 billion (net) per year, exclusive of any new costs tied to the new mobilization against Iraq.

Unrest in the Middle East has proven to be very expensive for the U.S. It is known that most of US foreign aid goes to Egypt and Israel, but we have shown here that the total costs of US policies in the region are very much higher than the aid bill itself. The tab is likely to jump once more, should the US actually go to war with Iraq again, because ‘burden-sharing’ will be much more difficult, and mercenary allies, such as Turkey, are likely to demand compensation ‘up front’, since they argue that they never received the aid promised to them during the prior Gulf war. Turkey is especially likely to demand considerable rewards, since it protests that it received little to offset the \$30 billion which it claimed it lost in the last affair. Conflicts in the ME have become expensive indeed for the US taxpayer.

APPENDIX

Summary Notes on Cost Calculations

This appendix summarizes the assumptions and definitions used in determining the various types of costs associated with US policies in the Middle East. The comprehensive analysis, fully sourced and documented, will appear later. These notes sketch for the interested reader the key elements in each type of cost. This discussion is relegated to an appendix in order that the flow of the analysis not be cluttered with methodological notes or details.

1. Crisis costs

1973 War.

Loss in US GDP because of oil shortages, plus the effect of the oil embargo upon oil prices. The increase in oil prices is interpreted as temporary, lasting from the end of 1973 through the end of 1985 when oil prices reverted to a more stable level. All costs restated for effects of inflation in 2001\$.

Strategic Petroleum Reserve

The costs of constructing the storage caverns and stocking them with oil, beginning in the late 1970's. All costs restated for effects of inflation in 2001\$. The salvage value of the stored oil has been estimated and deducted as a credit against the total cost. The investment is capitalized at a rate of 3%, the lowest rate discussed in guidelines from the Office of Management and Budget.

1978 Iranian Revolution and Iran-Iraq

War

The costs to the US economy are calculated as the additional increases in the price of imported oil, starting 1978. As in the earlier case, the effect is deemed to have terminated in 1985/6 when the Saudi-Kuwaiti ‘market share strategy’ resulted in much lower oil prices. All costs restated for effects of inflation in 2001\$.

Gulf War 1990-91.

Military costs are approximated as zero, since ‘burden-sharing’ by Gulf states and several OECD states covered the documentable incremental costs of the US engagement. Costs to the US consumer are the increase in prices which prevail from August 1990 through February 1991. All costs restated for effects of inflation in 2001\$.

2. Economic and Military Aid

“Aid” includes with minor exceptions only those expenditures which appear in foreign aid appropriation bills. Special grants, covert financing, industrial subsidies, and other form of ‘off budget’ aid are excluded but are sketched qualitatively in the text. All costs are restated for effects of inflation in 2001\$.

[1] The distinction ‘budgeted’ aid is important since additional support and aid has been channeled through off-budget devices, which reduces public attention. Further, statistically aid to the ‘Near East’ in US reports does not include aid to Turkey, which is classified as ‘Europe’, not the Middle East. The two are summed to present a more realistic picture of the regional impacts.

Support for Israel includes official aid, private aid from the US, and loan guarantees even though the latter are not defined as ‘aid’ in the narrow

sense. It also includes aid for Egypt and Jordan because of its political linkage to their relations with Israel.

Since increasing fractions of US aid to Israel are buried in diverse parts of the US budget, the figure probably seriously understates the full scope of aid from the US, just as the ‘lost jobs’ shown in the next section also understate the jobs which have been lost through offset programs and other ad hoc arrangements with Israel.

Aid to the Sudanese rebels, to Caspian states involved in ‘containing’ Iran, and other expenditures on the periphery may indeed be costs linked to US ME policy but they are excluded from the quantifications reported here.

The two latter categories might indeed sum to a material amount over the past 20 years, but hard data is elusive.

3. Lost Trade and Domestic Jobs

The first item is an estimate of the jobs lost in the US through the sanctions against Iran, Iraq and Libya and the deterioration of US political relations with those countries. ‘Lost’ trade is measured against historical market shares, and lost dollars are translated into lost jobs using consensus figures for the number of US jobs embedded in one billion dollars in exports.

Trade with stipendiary states like Israel, Egypt and Jordan is unpaid – i.e. especially in the case of Israel, the aid beneficiary imports much less from the US than the level of aid would warrant. The loss in jobs due to the marked trade-aid imbalance is calculated as above. The imbalance was actually greater still in the 90’s when one reckons the \$10 billion in special, non-budgeted aid in the form of loan guarantees. This was the equivalent of another 125-150,000 additional lost man-years of US employment

Good relations with some Gulf states, especially Saudi Arabia, translate into extra export jobs in the US, directly linked to policy. These are due almost entirely to substantial incremental sales of US arms and support systems. Thus, given the intimate link to policy, these gains cannot be excluded. They are noted in the summary table as “negative costs”, measured in terms of the number of additional export jobs in each year.

4. Energy Autarky (Project Independence)

It has not been possible to locate a realistic estimate of the costs incurred in trying to develop alternative sources of energy to ME oil, a policy thrust denoted as “Project Independence”. The cost of that hodge-podge of programs almost certainly comes to several hundred billion dollars – if not substantially more – with little discernible effect upon reducing US dependence upon ME oil.

The figure of \$100 bn displayed in the table is an estimate for the period 1980-2000 for only those programs which are easily identifiable and which ostensibly were designed to reduce energy dependence. Pre-existing programs, with rationales defined by prior policy objectives, are not included.

Since the rationale for the proliferation of programs for “home-grown” or renewable energy was almost cast in terms of a security benefit, the outlays are indeed part of US policy vis-à-vis the ME. Even an approximate quantification would lead to a better estimate of the overall costs of US policies towards the area.

5. ‘Defense’ of Gulf Oil Supplies

Defense of the Gulf is disputed an objective and even as a fact. It is argued that the US military presence in destabilizing and thus – far from protecting local oil production – the operations jeopardize supply even further.

Reported amounts are transparently inflated – i.e. figures of \$35-50 billion per year, since these include outlays which are not incrementally linked to operations in the Gulf itself. The estimate of \$ 2 billion per year is only an estimate, absent convincing independent data.

Note: total US costs certainly exceed \$2,500 billion. The figures in the table cannot be added since the bases differ from case to case. This incompatibility reflects the availability of data or differences between costs to the government and those to the US taxpayer.

[1] Methodological discussions have been relegated to the Appendix which accompanies the table itemizing the components of the cost burden. Footnotes are minimal; a longer, fully documented version of this paper will appear at a later date. The author wishes to thank the University of Maine and the Institute for Strategic Studies at the Army War College for the invitation to the conference where the paper was presented and also Brock Bevan for his research assistance. The author is responsible for any errors which remain.

[3] Brazil at various times exported some sugar-based ethanol to the US, in spite of opposition from ADM and US farmers.

[4] Such gas is denoted ‘Section 29’, in reference to the enabling legislation.

[5] See, by way of illustration, Citizen Action, Subsidizing Big Oil’s Foreign Investments: Importing Oil, Exporting Jobs and Making War, Washington, 1996

[6] US General Accounting Office, Southwest Asia: Cost of Protecting U.S. Interests, GAO/NSIAD-91-250, Washington, August 1991.

[7] See appendix for interpretation of each type of cost. Estimates are lower bounds, since some costs could be identified but not quantified. ‘Costs’ are only those borne by US consumer or by the US Government; costs to the rest of the world are considerably higher. Costs cannot be added together because some are consumer costs, some are balance of payments drains, and others were borne directly or indirectly by the USG but

did not flow identifiably to US consumers.