

Arms and Oil in the Middle East: A Biography of Research

Shimshon Bichler and Jonathan Nitzan

This essay interweaves two stories—one theoretical and empirical, the other autobiographical. The first story embeds the Israeli-Palestinian conflict in the broader political economy of the Middle East and the global accumulation of “capital as power.” The second story narrates the authors’ personal journey to uncover, theorize, and research this enfoldment. The essay explores and contextualizes the misleading duality of politics and economics; the link between military spending, finance, and stagflation; the concepts of “dominant capital” and “differential accumulation” and their evolution through “breadth” and “depth”; the manner in which these concepts and processes inform the political economy of Israel and the Israeli-Palestinian conflict; and the ways in which they help identify the key role of the Weapondollar-Petrodollar Coalition and predict the periodic eruption of Middle East “energy conflicts.” In their explorations, the authors have encountered numerous gatekeepers who tried to derail their research as well as a few open-minded editors who sought to promote it, and it is probably fair to say that, dialectically, they have benefited from both.

Key Words: Capital as Power, Differential Accumulation, Dominant Capital, Middle East Energy Conflicts, Weapondollar-Petrodollar Coalition

1. The Weapondollar-Petrodollar Coalition

During the late 1980s, we published a series of working papers offering a new approach to the political economy of Israel and wars in the Middle East.¹ The research journey leading to these papers started a decade earlier, with our attempt to understand the local political-economic roots of the Palestinian-Israeli conflict. Our local focus, though, proved too narrow. Gradually, we realized that the conflict, however domestic in appearance, could not be understood in isolation from the broader political economy of the Middle East, the role of the superpowers, particularly the United States, and the logic of capital accumulation more generally.

1. See Rowley, Bichler, and Nitzan (1988, 1989), Bichler, Nitzan, and Rowley (1989), Nitzan, Rowley, and Bichler (1989), and Bichler, Rowley, and Nitzan (1989).

In line with this broader vista, our approach in these working papers rested on three new concepts. It started by identifying the *Weapon-dollar-Petrodollar Coalition*—an alliance of armament firms, oil companies and financial institutions based mostly in the United States—whose interests, we posited, converged in the Middle East.² It continued by arguing that the interests of this coalition were best measured by its *differential accumulation*—i.e., by its performance relative to other large firms. And it concluded by showing that variations in differential accumulation predicted subsequent *Middle East energy conflicts*.

At the time, the papers seemed unpublishable. They were politically unaligned (neither neoclassical nor Marxist), and they were nondisciplinary (belonging to neither economics nor politics nor to any other social science, for that matter). But they made a scientific prediction: the Middle East, they argued, was ripe for another round of military hostilities and oil crises (Bichler, Rowley, and Nitzan 1989, sec. 2.3), and when the 1990–1 Gulf War broke out, their theoretical framework sounded very relevant.

Now, prediction alone does not guarantee publication, certainly in the mainstream social sciences. But these were no ordinary times. With the fall of the Soviet Union, the end of the Cold War, and the global victory of neoliberalism, the world of academic publishing began to change: talk of “capitalism” and “accumulation” was no longer politically incorrect, journals of critical political economy started sprouting everywhere, and enterprising editors, energized by the rekindled spirit of competition, hunted for new and different takes on a rapidly changing world.

One of these new journals was the *Review of International Political Economy (RIPE)*. The referees who vetted our piece were clearly schizophrenic, finding it hard to decide whether it was innovative and path breaking or faulty and unsubstantiated. But the *RIPE* editors decided to gamble, publishing our 124-page submission as-is in a two-part paper series (Nitzan and Bichler 1995; Bichler and Nitzan 1996b). Moreover, despite the exceedingly long page count, they agreed to include a data appendix with the articles’ raw financial time series.

2. The Unknown Facts

This last point merits elaboration. Good science depends on empirical evidence, and empirical evidence means more than findings and conclusions: it also requires authors to provide their raw data, discuss the data, and show that they indeed measure what they claim to. In economics (and in the social sciences more generally) this requirement is rarely met. In practice, most economists do not engage in

2. Our original term was the “Armadollar-Petrodollar Coalition,” but a journal referee later opined that the term “armadollar” sounded too much like armadillo, so we reluctantly replaced it with the duller yet safer “weapon-dollar.”

empirical analysis at all. The few who do empirical work seldom provide their data. And surprising as it may sound, many of the basic data they use—from “real GDP” to “productivity” to the “capital stock”—bear little or no connection to their declared conceptual underpinnings (Leontief 1982, 1983; Nitzan 1989; Bichler and Nitzan 2009, ch. 5–8).

But our reason for engaging with the data went beyond mere formalities. When the subject at hand is hamstrung by rigid disciplinary boundaries, exploring new data can be highly generative: it exposes contradictions, casts doubt, and calls for new categories, original ways of thinking, and novel theories.

To illustrate, take the study of oil. As it stands, the subject is crisscrossed with disciplinary barriers and boundaries: energy policies, the machinations of politicians, and the activities of state officials are normally dealt with by international-relations pundits; the causes and consequences of oil production, prices, and trade are monopolized by macroeconomists; individual companies and sectors are handled by applied microeconomists and finance specialists; the interaction between oil, religion, and ethnicity is dominated by experts of culture; and so on. Every aspect of this subject seems tucked within its own protected niche, mediated by its own concepts and methods and dominated by its own gatekeeping experts.

And the same holds true for the study of military spending and the arms trade. Here, too, the boundaries are clear: the interaction between armament, interstate conflict, and the balance of power belongs to international-relations specialists; the effect of armaments on overall trade and the balance of payments, employment, and growth rates is the domain of economists; and the impact of armament on domestic bellicosity is the purview of political scientists and culturalists.

These boundaries can be very stifling, serving to safeguard consensus, ward off challenges, and prevent novelty—and it is precisely in such a context that new data can prove subversive. As we shall see in the next section, our own work uncovered a new, long-term correlation between the differential profitability of the Weapondollar-Petrodollar Coalition and the periodic eruption of Middle East energy conflicts. The data showed that, although every regional conflict has its own features, and although these features relate to various aspects of society and therefore to different social sciences, we can go beyond these particularities. Specifically, we can identify a *general* process that encompasses, molds, and gradually shapes these otherwise unique conflicts, and we can show that this process belongs not to this or that narrow domain of society, but to the *universalizing power logic of capitalism at large*.

By predicting the historical ebb and flow of Middle East energy conflicts, differential profitability allows us to overstep the fractures separating international relations, economics, domestic politics, and culture. And as these fractures become less relevant, so do the categories they enforce and the theories they impose.

Take the foundational concept of “scarcity.” Economists use it to explain, rationalize, and justify the ways in which commodities are produced and priced. The larger the gap between our unlimited wants (demand) and limited means (supply), they argue, the greater the scarcity. The greater the scarcity, they continue, the higher the price on the one hand and the stronger the incentive to produce on the other. And since oil is a commodity like any other, they conclude, it follows that its production and pricing—just like the production and pricing of every other commodity—is driven by scarcity mediated by supply and demand.

Our own work, however, shows that this foundational concept is dubious. We have demonstrated not only that the very notion of scarcity is circular and nonscientific, but also that, even if valid, its conventional measure bears no systematic relation to the production and pricing of oil (Nitzan and Bichler 1995, 489, fig. 6; Bichler and Nitzan 2015, 52, fig. 1). In addition, we have showed that OPEC governments—which mainstream economic theory loves to blame for “intervening in,” “shocking,” and “distorting” the otherwise “free market” for oil—share the same pecuniary interests as the very oil companies they supposedly seek to undermine (Nitzan and Bichler 1995, 485, fig. 5; Bichler and Nitzan 2015, 58, fig. 2).

With so much going against it, it is no wonder that research like ours has been rare. Very few researchers have ever bothered to examine the historical profits, contracts, and sales of the leading oil and armament firms over the past century, let alone relate them to the political economy of the Middle East. And since nobody had investigated this subject, when we started our research in the late 1980s, these long-term time series simply did not exist: they had to be conceived, collated, analyzed, unified, and standardized, often from scratch.

And that wasn’t easy. First, there were theoretical issues. For example, what constitutes a “leading armament firm” or a “dominant oil company”? How should they be ranked? How do we reconcile their various accounting methods, different reporting periods, and numerous retroactive revisions? What is the meaning of “real” military spending and arms exports (as opposed to their nominal dollar values)?

And then there were practical hurdles. Recall that these were the 1980s, before the internet, the World Wide Web, and readily accessible databases. The “data points” were scattered across different libraries around the world, buried in various print publications. They had to be located and requested via snail mail. When found, they were snail mailed back via interlibrary loans—sometimes in print, at other times as photocopies or on microfiche. And when they arrived, they had to be collated, organized, and inputted, one datum at a time, into user-unfriendly computer programs (Microsoft Excel came into common use only five years later).

Given these difficulties and the amount of work needed to overcome them, we thought it was important to make our raw data freely available. We hoped that

these data would enable other scientists to critically engage with and extend our work, and we were therefore delighted that *RIPE* shared this vision of open science and was willing to put in the extra pages.

3. Energy Conflicts and Differential Profit

The historical link between energy conflicts and differential profits is demonstrated in [figure 1](#).³ The chart shows the differential return on equity of the Petro-Core. This measure is computed in two steps: first, by subtracting the return on equity of the group of Fortune 500 companies from the return on equity of the Petro-Core; and second, by expressing the resulting difference as a percent of the Fortune 500's return on equity. Positive readings (grey bars) indicate differential accumulation: they measure the extent to which the Petro-Core beats the Fortune 500 average. Negative readings (black bars) show differential *decumulation*: they tell us by how much the Petro-Core trails this average.⁴

A stretch of differential *decumulation* constitutes a “danger zone”—a period during which an energy conflict is likely to erupt in the Middle East. The actual breakout of a conflict is marked by an explosion sign. The individual conflicts are listed in the note underneath the chart (for a similar analysis that uses different data to show the same results, see Bichler and Nitzan 2015, 65–7).

[Figure 1](#) shows three stylized patterns that have remained practically unchanged for nearly half a century:

- First and most important, every energy conflict save one was preceded by the Petro-Core trailing the average. In other words, for a Middle East energy conflict to erupt, the leading oil companies first have to differentially *decumulate*.⁵ The only exception to this rule is the 2011 burst of the Arab Spring and the subsequent blooming of “outsourced wars” (our term for the ongoing fighting in Lebanon, Syria, and Iraq, which is financed and supported by a multitude of governments and organizations in and outside the region). This round erupted without prior differential *decumulation*—although the Petro-Core was very close to falling below the average. In 2010, its differential return on equity dropped to a mere 3.3 percent, down from 71.5 percent in 2009 and a whopping 1,114 percent in 2008.

3. [Fig. 1](#) was first published in Nitzan and Bichler (1995, 499, fig. 10b) with data ending in 1991. It was later updated in Bichler and Nitzan (2015, 64, fig. 4) with data through 2013. An earlier, non-differential chart is given in Rowley, Bichler, and Nitzan (1989, 26, fig. 8).

4. The disproportionately high values for 2002 (+426 percent), 2007 (+892 percent), and 2008 (+1,114 percent) are due to the Fortune 500's very low rates of return in those years.

5. In the late 1970s and early 1980s, and again during the 2000s, differential *decumulation* was sometimes followed by a string of conflicts stretching over several years. In these instances, the result was a longer time lag between the initial spell of differential *decumulation* and some of the subsequent conflicts.

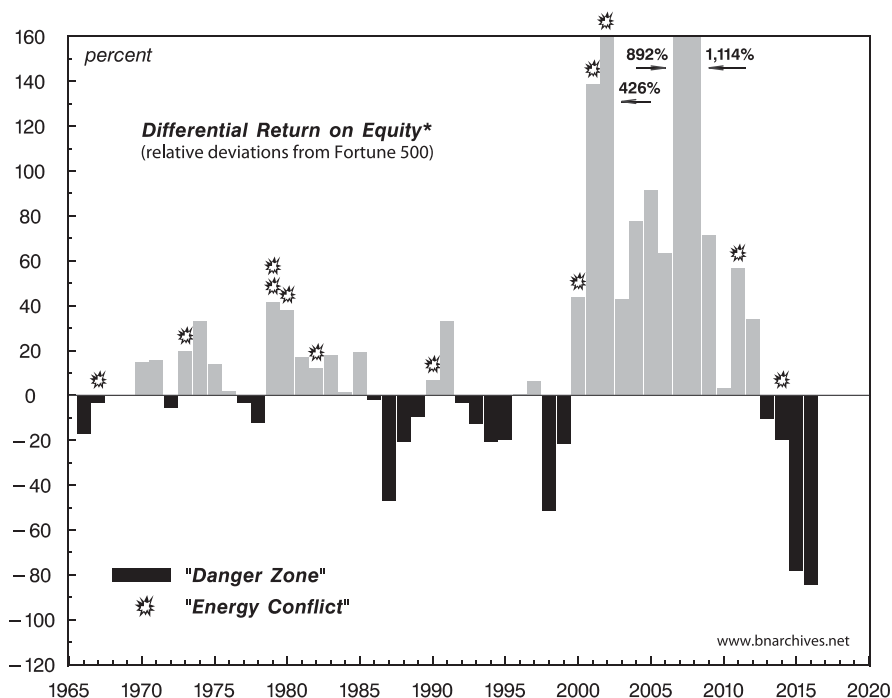


Fig. 1. Energy Conflicts and Differential Profits: The Petro-Core vs. the Fortune 500
 * Return on equity is the ratio of net profit to owners' equity. Differential return on equity is the difference between the return on equity of the Petro-Core and the Fortune 500, expressed as a percent of the return on equity of the Fortune 500. For 1992–3, data for Fortune 500 companies were reported without SFAS 106 special charges. The last data point is for 2016.

NOTE: The Petro-Core consists of British Petroleum (BP Amoco since 1998), Chevron (with Texaco since 2001), Exxon (ExxonMobil since 1999), Mobil (before 1998), Royal Dutch Shell and Texaco (before 2000). Company changes are due to mergers. Energy conflicts mark the starting points of the 1967 Arab-Israeli war, the 1973 Arab-Israeli war, the 1979 Iranian Revolution, the 1979 Soviet invasion of Afghanistan, the 1980 Iran-Iraq War, the 1982 second Israeli invasion of Lebanon, the 1990–1 first Gulf War, the 2000 Second Palestinian Intifada, the 2001 attack of 9/11 with the launching of the "War on Terror" and the invasion of Afghanistan, the 2002–3 second Gulf War, the 2011 Arab Spring and outsourced wars, and the 2014 third Gulf War.

SOURCES: Reproduced and updated from Bichler and Nitzan (2015, 64, fig. 4); data from *Fortune*, *Compustat* through WRDS, and *Mergent*.

- Second, until 2014 every energy conflict was followed by the oil companies beating the average. In other words, until very recently, war and conflict in the region—processes that are customarily blamed for rattling, distorting, and undermining the aggregate economy—served the differential interests of the

large oil companies at the expense of leading nonoil firms.⁶ This finding, although striking, should not surprise us: differential oil profits are intimately correlated with the relative price of oil (Bichler and Nitzan 2015, 60, fig. 3); the relative price of oil is in turn highly responsive to Middle East risk perceptions, real or imaginary; these risk perceptions tend to jump in preparation for and during armed conflict; and as the risks mount, they raise the relative price of oil and therefore the differential accumulation of the oil companies. (This long-term pattern, though, appears to have been broken with the onset of the third Gulf War in 2014. Despite the ongoing hostilities, oil prices have plummeted and differential decumulation has not only continued but reached record lows. We return to this apparent structural change in the last section of the essay.)

- Third and finally, with one exception, in 1996–7, the Petro-Core never managed to beat the average without there first being an energy conflict in the region.⁷ In other words, the differential performance of the oil companies depended not on production but on the most extreme form of sabotage: war.⁸

As far as we know, this analysis remains unique: no one else has uncovered the patterns it reveals, let alone analyzed its underlying relationships and broader implications.

4. Politics and Economics

The questions leading to this analysis first emerged in the early 1980s when we were still university students—though initially these questions pertained not to the global political economy of the Middle East but to Israel. During those years, the country was mired in a deep crisis that had started in the early 1970s and intensified after the political rise of the radical Right in 1977. The crisis was marked by two seemingly unrelated phenomena: stagflation and militarization.

The stagflationary process combined decelerating growth and rising unemployment on the one hand with soaring inflation and a booming stock market on the other. In 1983, at the peak of this process, Israel's one-year-old invasion of Lebanon appeared headed for a humiliating defeat, the economy stagnated, and inflation hit 200 percent. The stock market, however, rigged by the large conglomerates, the

6. It is important to note here that the energy conflicts have led not to higher oil profits as such but to higher *differential* oil profits. For example, in 1969–70, 1975, 1980–2, 1985, 1991, 2001–2, 2006–7, 2009, and 2012, the rate of return on equity of the Petro-Core actually fell; but in all cases the fall was either slower than that of the Fortune 500 or too small to close the positive gap between them, so despite the absolute decline, the Petro-Core continued to beat the average.

7. Although there was no official conflict in 1996–7, there was plenty of violence, including an Iraqi invasion of Kurdish areas and U.S. cruise missile attacks (“Operation Desert Strike”).

8. For the details underlying the individual energy conflicts as well as a broader discussion of the entire process, see Bichler and Nitzan (1996b, 2004), Nitzan and Bichler (2002, ch. 5; 2006b).

finance ministry, and the central bank (yes, by all three, in daily collusion) reached an all-time high.⁹

In this context, we found it striking to see Israeli academics insisting that politics and economics must be studied separately and independently. On the “political” side, the country was becoming increasingly militarized and racialized. Labor governments have long maintained that Israel’s was an interstate conflict with its Arab neighbors. However, Menachem Begin’s new right-wing government abandoned this facade. By embarking on an open policy of Jewish settlements and permanent military rule in the occupied Palestinian territories, by invading Lebanon with the stated intention of “cleansing” it of “Palestinian terrorist organizations,” and by cementing the bond between the Rabbinate church, Israeli nationalism, and Jewish racism, this government exposed the true roots of the conflict: a foundational clash between the Zionist project and the indigenous Palestinian population.

The “economy,” though, continued to function as if none of this mattered—or so it seemed. For Israeli social scientists, the economic categories of supply, demand, equilibrium, productivity, the capital stock, output, and prices—and therefore the actual economy they defined—remained self-contained. Politics, militarization, religion, and racism of course counted but only as “external shocks” and “distortions.” Moreover, these shocks and distortions were remnants of an old statist legacy, and the good news was that, courtesy of the new “liberal” government, they were finally on their way out.

The insistence on separating economics from politics produced strange bedfellows—for example, free-market economists leading Peace Now demonstrations. During the day these economists worked in the service of capital, advising governments, consulting corporations, and preaching the wonders of perfect competition and the evils of government intervention. At night, though, they marched the streets and gave speeches, calling on their government to end the occupation and give the Palestinians their own state. And for most observers this marriage looked natural. In their minds, Israel’s occupation of the Palestinian territories and its statist economy were offspring of the same original sin: Socialist Zionism. Relieving Zionism of its socialism, they argued, would liberate both the Palestinians and the market in one fell swoop.

This context helped keep the country’s social sciences, founded during the Cold War, highly conservative. They dismissed Marxism as irrelevant to the Israeli case, discouraged broad criticisms, and penalized innovative dissent. Most of their academics were mainstream, and even those who saw themselves as radical and socialist rarely allowed their “political beliefs” to affect their “professional research.” Between the late 1970s and the late 1980s—the dark years of the Begin-Peres-Shamir regime—you could not find a single paper written by an

9. The rigging of the stock market was reluctantly and only partially investigated by the Bejsky Commission (see Bejsky et al. 1986). See also Nitzan and Bichler (2002, 119).

Israeli academic in a heterodox journal of political economy (let alone a paper that used radical methods and theories).¹⁰

At the time, the only people who offered Marxist political-economic analyses of Israel and its broader context were members of Matzpen, a radical left movement of Hebrew and Arab activists founded in the 1960s. According to Orr and Machover's seminal book *Peace, Peace, and No Peace* (1961, 2009; the latter, English translation has a slightly different title), Israel's evolution was rooted, first and foremost, in its conflict with the Palestinians—a process that, they argued, began in the late nineteenth century with the Zionists' first organized colonization of the country, abated after the Palestinian defeat of 1948, and reignited with the 1967 occupation of additional Palestinian territories in the West Bank and Gaza.¹¹

An innovative Marxist exploration of this process was offered by another Matzpen activist, Emmanuel Farjoun (1978, 1980, 1983). Farjoun identified a progressive “dual-economy” bifurcation of the Israeli labor market into both a monopoly sector of large firms with unionized employees and also a competitive sector of small firms with unorganized workers. The 1967 occupation of the West Bank and Gaza, he showed, hastened this bifurcation by flooding the competitive sector with cheap Palestinian labor. And this hastening, his work suggested, made the Palestinians highly dependent on Israel, weakened the position of organized Jewish labor relative to capital, and eventually paved the way for the rise of Israel's radical Right.

5. Military Spending and Inflation

As noted, our own research focus was the twin processes of militarization and stagflation, and at the time this focus seemed congruent with “macro-Marxist” theories that emerged in the United States in the 1960s during the Vietnam War and that gained traction during the stagflation crisis of the 1970s. The most relevant of these theories, we thought, was the monopoly capital thesis, which was broadly associated with the works of Kalecki (1971, 1972), Huberman (1961 [1936]), Tsuru (1956), Steindl (1945, 1976 [1952], 1984 [1979]), Baran and Sweezy (1966), Magdoff (1969, 1972), Braverman (1998 [1974]), and Magdoff and Sweezy (1987 [1983]), among others. The monopoly capital thesis posits that the monopoly stage of capitalism is characterized by a growing divergence between falling costs and rising prices. This divergence, the theory claims, generates on the one hand a tendency for the surplus to rise while on the other hand it limits the system's inherent ability to offset or absorb this surplus. And these conflicting processes, it concludes, serve to alter the nature of the state.

10. On the academic literature of the period, see Nitzan and Bichler (1996, 1997).

11. Although it relied solely on public sources, their book was banned by the Israeli censors.

During the competitive capitalism of Marx's time, argued the theory's advocates, growth was led by private investment, and since taxation was imposed mostly on profit and therefore reduced the amount available for investment, the state was expected to stick to a *laissez-faire* policy of limited intervention and to a minimal tax footprint. The monopoly phase of capital, though, shifted the emphasis. The growth of large firms made capitalism hyperproductive, which meant that the key challenge now was not how to produce more surplus (supply) but how to realize it (demand). And this is where "state intervention" became crucial.

In principle, the state can expand the economy's aggregate demand in a variety of ways: it can spend on civilian items such as low-cost housing, education, R&D, health, and infrastructure (welfare); it can increase its military budget (warfare); or it can engage in some combination of the two. In practice, though, the state's options are more limited. Big business and the leading capitalists loathe facing government competition in civilian markets. They also dread losing their commanding heights—and therefore the ideological supremacy of private investment—to public management of the economy. And given these objections, the only way left for a capitalist government to avoid stagnation is through what David Gold (1977) called "military Keynesianism": a bellicose form of demand management led by a "Keynesian Coalition" of big business and large unions that shun peaceful civilian spending in favor of armaments and an aggressive foreign policy.

Figure 2 contextualizes this new order of monopoly capitalism. The graph shows the century-long relationship between U.S. economic growth and the country's military spending. The thin line plots the annual rate of economic growth against the right-hand scale. The thick line shows the level of military spending, expressed as a share of GDP, against the left-hand logarithmic scale. Both series are smoothed as a ten-year trailing average to emphasize their long-term tendencies.

The data show the close co-movement of the two series (a Pearson correlation coefficient of +0.58). After the First World War, disarmament went hand in hand with falling growth, but this situation proved temporary. In the 1930s, the tide inverted: military spending soared in preparation for the Second World War, and the economy boomed. After the war, when demobilization coincided with a sharp drop in growth, the U.S. National Security Council (1950) suggested that, looking forward, the government should consider keeping military expenditures permanently high as a way of avoiding another depression. The subsequent adoption of military Keynesianism, along with the wars in Korea and Vietnam, helped achieve that goal. During the 1960s–80s, military expenditures remained over 10 percent of GDP and economic growth above 4 percent—lower than during the Second World War but rapid enough to sustain the buoyancy of American capitalism and the confidence of its capitalists. By the early 1990s, though, the Cold War had ended, and with neoliberal "peace dividends" undermining military budgets, economic growth decelerated sharply: in the decade ending in 2016, growth fell to a mere 1.3 percent, a level last seen in the 1930s.

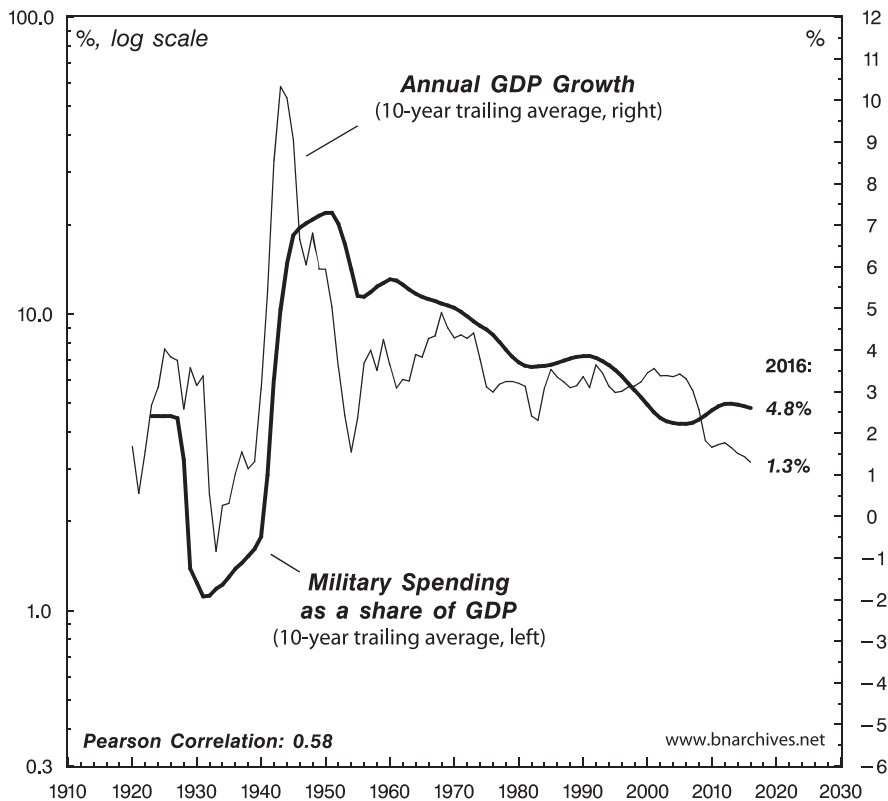


Fig. 2. U.S. Military Spending and Economic Growth

SOURCE: Reproduced and updated from Nitzan and Bichler (2006a, 6, fig. 1); original data from the U.S. Bureau of Economic Analysis, Global Financial Data.

On the face of it, the logic behind this correlation was highly pertinent to 1980s Israel, in whose economy rapid business concentration and soaring inflation appeared to have been offset by rising military budgets, massive spending on settlements, and the bloating of religious institutions and organizations. The only thing left to do was to test this relationship empirically, but this testing proved easier said than done.

6. Mapping Israel's Dominant Capital

The main problem was that Israeli scholars—including those on the left—had never bothered to map their country's unfolding capitalist structures, class relations and power dynamics. The most neglected subject was the corporate core—that is, the largest holding groups and their intricate relations with the state. In our view, any investigation of a modern capitalist polity must begin with this

core, yet in Israel of the early 1980s, nobody knew the basic historical facts about it. Even the most rudimentary financial time series—the core’s total assets, net profits, and sales and the owners’ equity—were unavailable.

In fact, even the raw data—the companies’ annual financial reports—could not be found in any one location. The most obvious depositories—the Central Bureau of Statistics, the Bank of Israel, the Ministry of Finance, and the Office of the Tax Comptroller—possessed only disorganized fragments. The National Library, which according to Israeli law must be given two copies of every print publication, had no more than a limited sample. And when we checked with the companies themselves, we learned that they too had only a few specimens—and we were asking for their *own* financial reports! The net result was that the financial history of these firms, and by extension their political-economic significance, was largely unknown. For lay persons, these firms seemed everywhere; for the pundits, they were nowhere.

And so we decided to fill the void. We labored for months, excavating, deciphering, and organizing the obscure facts. And since these were the mid 1980s, before the internet and readily accessible computerized data, everything had to be done manually. We had to go from office to office, from library to library, from archive to archive. We had to collate, photocopy, and when necessary hand copy the individual printed reports wherever we found them. We had to read the numerous footnotes and extensive small print to reconcile endless inconsistencies and numerous revisions (particularly those associated with hyperinflation “adjustments” and retroactive “restatements”). Eventually, we managed to assemble a rudimentary, albeit historically complete, statistical picture of what we subsequently called Israel’s *dominant capital* (see Bichler 1986, 1991; Nitzan 1986; Rowley, Bichler, and Nitzan 1988). And it was only then, when we started analyzing this entity, that we finally realized why everyone was trying to keep it safely in the statistical shadows.

7. From Breadth to Depth: Accumulating through Crisis

Our analysis indicated that until the mid 1960s, the structure of the Israeli market had been rather dispersed, at least by subsequent standards (Nitzan and Bichler 2002, ch. 3). This structure, formed during the British Mandate era, consisted of three distinct sectors. The dividing lines were primarily “political”: the largest and most important sector was the government; the second largest was the Histadrut (confederation of labor unions); and the third was private. Since greenfield investment was almost entirely financed by unilateral capital inflows, and since these inflows were allocated almost exclusively by the government, the economy was considered “statist.”

The leading corporations and economic organizations, often in collaboration with politically connected families and foreign investors, acted as de-facto agents of the state, abiding by its macro and micro priorities. In return, they were

invited to invest in and trade with government-sanctioned projects, were awarded state subsidies and exclusive licenses, enjoyed multiple protections against foreign and domestic competition, and participated in looting the properties abandoned by and confiscated from the Palestinian refugees of 1948.

In retrospect, we can say that the state during those years acted as a sheltering “cocoon,” incubating the future business organizations and institutions that would eventually become the core of Israel’s political economy. The 1966–7 recession helped shed this cocoon. Following a massive wave of mergers and privatization, the old “political” sectors disintegrated, replaced by dominant capital: a small cluster of giant holding groups surrounded by big monopolies and large investors that gradually took over the commanding heights of Israeli society and eventually transformed it into a full-fledged capitalist mode of power. In 1996, we summarized this transformation as follows:

Until 1972, economic growth in Israel was disproportionately affected by two “external” stimuli: (1) the unilateral capital inflow of German compensation between 1955 and 1965, and (2) the “Palestinians boom” in the immediate years after the 1967 War. During the 1955–1965 period, unilateral transfers from Germany accounted for most of the capital inflow, and were almost identical to the annual change in GNP. The end of these transfers in 1965 was followed by the severe recession of 1966–1967. The situation changed again in 1968, when the Israeli market suddenly expanded to include one million new consumers from the occupied territories. ...

... From the early 1970s onward, the growth of the large conglomerates came to depend increasingly on the differential *depth* [relative growth of profit per employee] rather than *breadth* of accumulation [relative growth of employment]. This was achieved in three principal ways. First, mergers and acquisitions brought a larger share of the profit under the control of these firms, enabling them to better control competition and prevent an unruly rise in capacity. Second, with civilian production entering a period of protracted stagnation, resources started shifting into financial activity and inflation began to rise. The conglomerate’s financial assets were inflated relative to the economy’s total, and the share of labour eroded. Finally and perhaps most importantly, the intensification of the Israeli-Arab conflict contributed to rising military spending and growing arms exports. This burdened the aggregate economy, but much like in the US, the ensuing “military bias” was highly beneficial, both relatively and absolutely, to the leading arms contractors of the big economy ... This pattern of “military/financial accumulation” was typical to all of the core firms. (Nitzan and Bichler 1996, 74–5, 77)

As part of this transformation, the government—particularly after the 1977 rise of the radical Right—altered its domestic and foreign stance. Domestically, it adopted a laissez-faire rhetoric of deregulation and privatization, gradually withdrawing

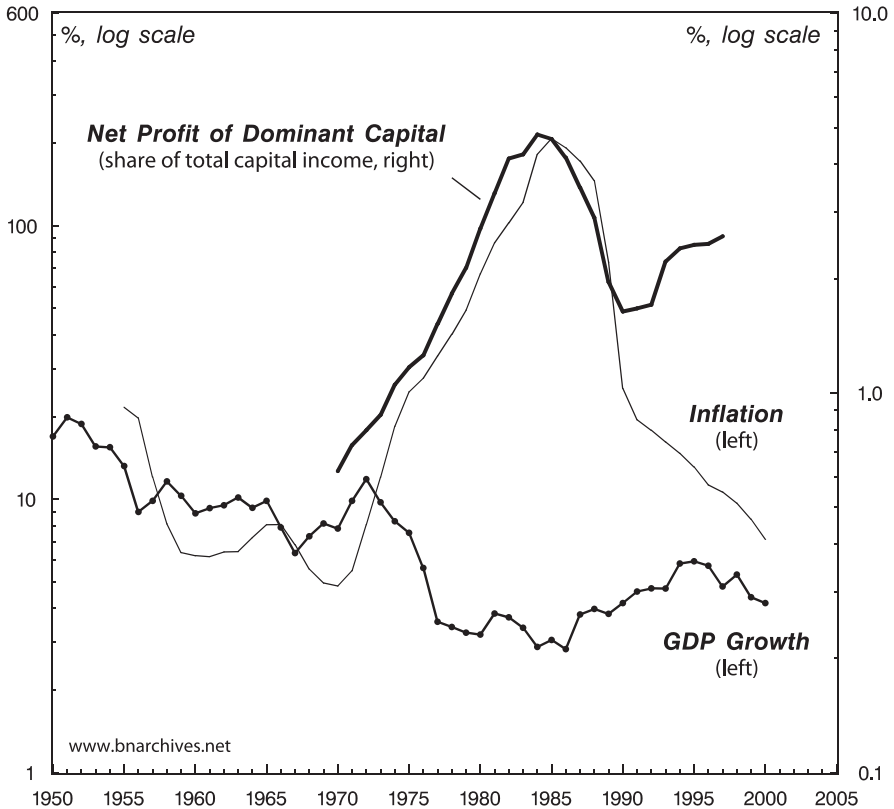


Fig. 3. Israeli Stagflation and Differential Accumulation

NOTE: Series are shown as five-year trailing averages. Inflation is the annual rate of growth of the GDP deflator. Dominant capital includes Leumi, Hapoalim, IDB, Koor, and Clal. SOURCE: Reproduced with slight stylistic modifications from Nitzan and Bichler (2002, 124, fig. 3.2); original data from corporate financial statements and Israel Central Bureau of Statistics.

from its former role of directing and determining greenfield investment. In terms of foreign policy, however, it pursued a proactive, bellicose line, menacing neighboring countries and especially the Palestinians. This double movement helped alter the focus of accumulation: instead of the rapid employment and GDP growth that had marked the previous regime (“external breadth” in our terminology), the emphasis shifted to income redistribution via rising military spending and stagflation (“external depth”).

And so began the gilded age of Israel’s militarized capitalism (Nitzan and Bichler 2002, ch. 4). The gist of this period is illustrated in figure 3. The chart shows two sets of series, both smoothed as five-year trailing averages. The left-hand log scale denotes the rates of GDP growth and inflation while the right-hand log scale

indicates the differential profits of the top five holding groups (computed by the share of their net earnings in total capital income).

As we can see, until the mid 1960s, when the Israeli market was still relatively dispersed, growth was very high (~10 percent) and inflation relatively low by subsequent standards (~8 percent). But by the late 1960s, the rise of dominant capital had triggered a radical change. GDP growth plummeted, reaching less than 3 percent in the mid 1980s, while inflation, instead of falling as mainstream economics would have predicted, soared to over 200 percent. This stagflation was a boon for dominant capital. As the figure shows, its differential earnings benefited massively and disproportionately relative to the rest of the business sector, soaring eightfold to 5 percent in the mid 1980s, up from 0.6 percent in 1970. This bonanza, though, ended in the late 1980s, when the global rise of neoliberalism introduced a totally new regime of accumulation, forcing small-to-medium bellicose countries such as Israel and South Africa to radically transform their mode of power, open up to foreign takeovers and scale back their militarized structures (Nitzan and Bichler 2001; Bichler and Nitzan 2007).

8. The Gatekeepers

Nowadays, these observations may seem less controversial. But when they were first made in our master's theses and doctoral dissertations, they elicited stiff academic opposition. Nitzan's (1986) master's thesis, submitted to the Department of Economics at McGill University, was failed by its external referee. Titled "Holding Groups and the Israeli Economy," the thesis demonstrated the close connection between rising inflation and the differential consolidation of Israel's dominant capital, among other relationships, and these claims were too much for its Canadian Zionist reader to stomach. As an orthodox agricultural economist, conditioned by the elegance of supply and demand, she could not fathom how a purely macroeconomic process such as inflation could have any connection to a "social" phenomenon like the redistribution of income, so she ceremonially failed the thesis.¹² It cost Nitzan two years of legal wrangling, grievances, appeals, and lost reputation to have the referee's report jettisoned and the thesis accepted and reinstated. The research itself was later published in *Science & Society* (Nitzan and Bichler 2000).

Similarly with Bichler's work. His Ph.D. dissertation, titled "The Political Economy of Military Spending in Israel," was submitted to the Department of Political Science at the Hebrew University (Bichler 1991). The thesis examined the

12. As a devout Zionist, she was also enraged by many of the unpleasant facts cited in the thesis. For example, she did not like Nitzan's reference to the 700,000 Palestinian refugees produced by the 1948 war, a number she believed to be grossly exaggerated. She also disliked some of Nitzan's sources: for example, Israel's most important investigative weekly, *Ha'olam Hazhe*, which in her view was a yellow newspaper.

connection between military spending and the rise of Israel's dominant capital. The research, based partly on Kalecki's framework, bifurcated the business sector into two segments—dominant capital and “the rest”—and showed, among other things, that military expenditures operated to redistribute income in favor of the former group while civilian spending worked in favor of the latter.

The dissertation committee members had never heard of Kalecki and were therefore indifferent to his radical model being applied to Israel. They were flabbergasted, though, by Bichler's unpatriotic econometrics. His empirics demonstrated that Israel's wars might have served and even depended on the profits of its large corporate groups, and this possibility was impossible for them to contemplate.

The dissertation was sent to an external referee with an explicit instruction to fail it—only that here, unlike in Nitzan's case, the referee refused to cooperate and informed Bichler of the plot. The committee, though, was unfazed and approved the dissertation only after Bichler deleted the offensive econometric chapter. Our attempts to publish this research in mainstream journals were repeatedly rejected on equally embarrassing pretexts. Eventually, it was published in the *Review of Radical Political Economics* (Bichler and Nitzan 1996a).

9. The CasP Triangle: Capitalized Power, Dominant Capital, and Differential Accumulation

As noted, our early research was heavily influenced by Marxism, particularly the neo-Marxist version of monopoly-capital theory.¹³ Yet from the very beginning we sensed that something in this framework was seriously lacking. Our initial plan was simply to “follow the surplus.” We naively thought that, by tracing the various realizations of this surplus—from military spending and the settlements to religious institutions and financial intermediation—we would be able to narrate the development of Israeli capitalism and model its gyrations. But as we delved into the actual research, we realized that the basic categories (surplus, capital accumulation, rate of profit, etc.) and the dualities in which they were embedded (economics-politics, real-financial, productive-speculative, actual-fictitious) were difficult if not impossible to concretize and measure. Seeking solutions, we delved into Marxist debates on these subjects, but they discouraged us even further.

The problem, we concluded, was that the neo-Marxist revisions of Marx's value theory did not go far enough. Instead of placing power at the center of analysis, they treated it as an addendum, a separate sphere that merely complements the

13. Since the 1980s, “neo-Marxism” has been broadened to include various cultural theories associated with writers such as Gramsci, Foucault, Leotard, and Jameson. In this essay, we use the term much more narrowly to denote scientific attempts to revise and adapt Marx's value analysis to the new age of monopoly capitalism.

key “economic” entities of capitalism. And that path, we thought, was leading to a dead end (for a concise summary of these difficulties, see Bichler and Nitzan 2012).

To analyze contemporary capitalism, we argued, requires a fundamental rethinking of capital itself (for a full account, see Nitzan and Bichler 2009). First, we posited that accumulation is neither a utilitarian process distorted by power (the neoclassical version) nor a productive process assisted by power (the Marxist view) but rather a power process quantified as capitalization.

Second, we argued that, with power at the center of analysis, the macro-Marxist notion of “capital in general” becomes insufficient and potentially misleading. Instead, we need to *differentiate* various forms of capital, and we need to do so based on *relative power*. This requirement led us to the notion of dominant capital—the idea that the capitalist mode of power is dominated by a core of leading corporate groups and state institutions—and that it is the inner and outer alliances and conflicts of this core that stir the historical development of capitalism as a whole.

And third, we claimed that the shift from utility and labor to power, on one hand, and from general capital to dominant capital, on the other, called for a *new building block*. The conventional view of capital is economic and therefore absolute. Wedded to production and consumption, capital in this view is counted in stand-alone units, be they neoclassical “utils” or Marxist “SNALT” (socially necessary abstract labor time). But if we think of capital in terms of power, we must also change our elementary particle: we need to think not of absolute accumulation but of *differential accumulation*.

10. From Israel to the Middle East

As we came to realize, the significance of this CasP triangle—that is, capitalized power, dominant capital, and differential accumulation—goes beyond Israel. Many Middle East analysts, both mainstream and radical, continue to see the region’s conflicts as imperial in nature, related first and foremost to securing Western access to cheap oil. But as [figure 1](#) in [section 3](#) shows, using the CasP triangle, the underlying logic of these conflicts can be explained very differently.

The chart analyzes the history of these conflicts not in relation to the level of oil production or the rate of Western economic growth but to the differential profit of the dominant oil companies. As noted earlier in the essay, over the past half century the differential profit of these firms as well as the relative earnings of oil-producing countries (OPEC and non-OPEC) have come to depend not on the volume of oil being produced and sold but on its relative price,¹⁴ and this relative price hinges not on the “scarcity” of oil, but on the mayhem and fear created by Middle East energy conflicts.

14. At the global level, the price and volume of oil show little or no correlation (Bichler and Nitzan 2004, 305–6, n42).

The predictive power of this framework has been remarkably robust, at least until recently. To reiterate, according to [figure 1](#), every energy conflict save one was preceded by the leading oil companies trailing the average (differentially *decumulating*); until 2014, every energy conflict was followed by the oil companies beating the average (differentially *accumulating*); and with one exception (1996–7), these companies never managed to beat the average in the absence of a prior or concurrent energy conflict. Clearly, accumulation here represents and manifests not productivity and utility but power and violence.

11. Still About Oil?

Is this framework still valid today? In our opinion, the answer is “only in part.” On the one hand, the differential profits of the oil companies and the revenues of the oil-producing countries remain tightly correlated with the relative price of oil: over the past decade or so, both have plummeted in tandem. So this side of the theory still works. On the other hand, as [figure 1](#) demonstrates, since 2014 the synchronized decline of oil prices and earnings has occurred *despite* ongoing regional conflict and plenty of violence. On this count, the theory seems inconsistent with recent events.

Is this partial breakdown a sign of things to come? Will the differential profits of the Weapondollar-Petrodollar Coalition continue to stir *Blood and Oil in the Orient*, as Essad Bey (1932) poetically called it, or are we witnessing the end of an era?

In our view, the answer to this question will depend crucially on the conflict within the global ruling class.¹⁵ The potential significance of such intraclass conflicts was illustrated during the 1960s by Michael Kalecki (1964, 1967). In his essays “The Fascism of Our Times” and “Vietnam and U.S. Big Business,” Kalecki forecasted that continued U.S. involvement in Vietnam would increase the dichotomy between the “old,” largely civilian business groups located mainly on the U.S. East Coast and the “new” militarized business groups, primarily the arms contractors, of the West Coast. The rise in military budgets, he anticipated, would force a redistribution of income from the old to the new groups. The “angry elements” within the U.S. ruling class would then be significantly strengthened, pushing for a more aggressive foreign policy and further propagating what Melman (1974) would later call the “permanent war economy.”

Is there a similar intraclass conflict affecting the ebb and flow of Middle East wars? To contextualize this question, consider [figure 4](#), which juxtaposes two global coalitions: the Weapondollar-Petrodollar cluster, made up of listed integrated oil and defense corporations, and the Technodollar Coalition, comprising listed technology firms, both hardware and software. Each series measures the market

15. For more on the issues discussed in this section, see Bichler and Nitzan (2004, 2015), Nitzan and Bichler (2006b).

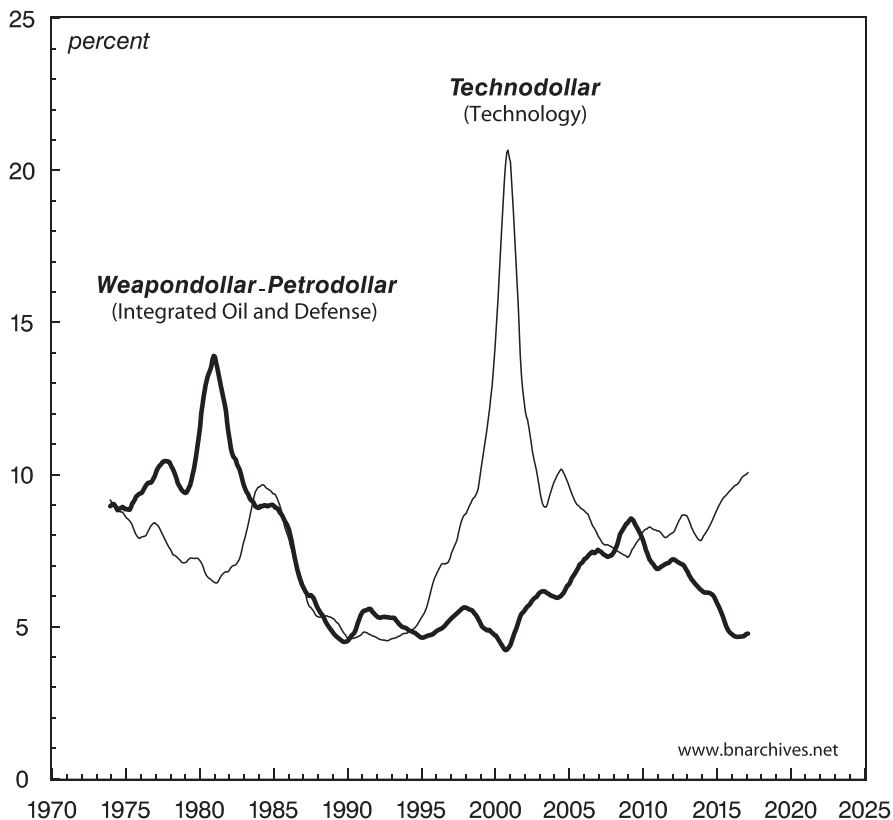


Fig. 4. Shares of Global Market Capitalization

NOTE: Series denote monthly data shown as 12-month moving averages. The last data points are for February 2017.

SOURCE: Reproduced and updated from Nitzan and Bichler (2009, 373, fig. 17.3); original data from Datastream (series codes: TOTMKWD for world total, OILINWD for integrated oil; AERSPWD for defense; TECNOWD for technology).

capitalization of the relevant coalition, expressed as a percent share of the global market capitalization of all listed firms.¹⁶

The figure shows a clear inverse relationship: since the mid 1970s, the global market capitalization shares of the two coalitions have moved in *opposite* directions (with only a brief exception in 1985–90). Now, since relative capitalization hinges on differential profit expectations and risk assessments, and since these expectations and assessments reflect the broader trajectories of the global political economy, we can hypothesize that there is an *inherent conflict* between these two coalitions: conditions that favor one coalition undermine the other, and vice versa.

16. A similar chart, focusing only on the United States, is given in Nitzan and Bichler (2002, 272, fig. 5.9).

The significance of this structural conflict is best evaluated in historical retrospect. The classical imperialism of the early twentieth century was spearheaded by the leading oil companies, whose activities dominated and often dictated the foreign policies of the old powers. After the First World War, these companies helped draft various regional agreements—from Sykes-Picot (1916), San Remo (1920), and Cairo (1921) to Red Line (1928) and Achnacarry (1928)—carving and shaping the Middle East in line with their own interests. During that period, their main concern was the “free flow” of oil—that is, political stability, open access to oil at low prices, and minimal royalties to the region’s rulers.

This free-flow era ended in the late 1960s and early 1970s. The demise of colonialism undermined the oil companies’ former autonomy. Instead of calling the shots, they now had to negotiate and align with oil-producing oligarchies, elements in their own parent governments and armed forces, and other corporate coalitions, particularly in armament and finance. The center of this complex network, we have argued in our work, was the Weapondollar-Petrodollar Coalition. Unlike during the free-flow era, their interest now lay in *limiting* the flow of oil. The main purpose was to *raise* the price of oil so as to boost oil incomes and augment military spending and arms exports into the region. And that goal was best served by a divide-and-rule strategy that kept the Middle East embroiled in a never-ending string of managed energy conflicts that stoked the Cold War and the arms race and pushed the world into reoccurring stagflation crises.

In the 1990s, the capitalist mode of power was again transformed. First, the end of the Cold War accentuated the gradual decline of the United States and the former Soviet Union relative to the former periphery, particularly in Asia. Second, the ongoing global wave of corporate mergers and acquisitions gave rise to a new and highly complex power hierarchy of giant transnational corporations whose activities, although deeply embedded in state structures, gradually work to undermine the very notion of “state sovereignty.” And third, the pivotal political-economic role of oil has been challenged by the threats of peak oil and climate change, the development of renewable alternatives, and most importantly, the emergence of new power hierarchies built not on raw materials, but information—hence, the Technodollar Coalition.

The rise of this new, information-based power is illustrated in [figure 4](#). Between 1990 and 2000, the global market capitalization of the Weapondollar-Petrodollar Coalition continued its long-term slide, hitting a record low of 4 percent of the total in 2000, down from 14 percent in 1980. By contrast, the market capitalization of the Technodollar Coalition more than quadrupled—rising to 21 percent of the total in 2000, up from a mere 5 percent in 1990.

In the early 2000s, the Weapondollar-Petrodollar Coalition embarked on a last-ditch attempt to resurrect its capitalized power, pushing the U.S. White House toward yet another Gulf War. And for a decade or so, the effort succeeded: by 2010, the Technodollar Coalition’s market capitalization dropped to a mere 7

percent of the total—the experts called it a “burst bubble”—while the Weapondollar-Petrodollar Coalition’s share doubled to 8 percent.

This comeback, though, was partial and short-lived. In 2010, with the Middle East still in flames and the analysts predicting the imminent arrival of peak oil, the price of oil—along with oil profits—started to plummet. And as the plunge continued, the market capitalization of the Weapondollar-Petrodollar Coalition again fell below 5 percent of the total, while that of the Technodollar Coalition resumed its uptrend. Evidently, the current conflicts in the region are not “intense” enough to create a crisis atmosphere, and with oil prices low, the petroleum and armament firms, along with OPEC, remain stuck in the doldrums.

The new Trump Administration, populated by key oil, armament, and finance representatives and seemingly hostile to the high-technology sector, may try to revive the fading fortunes of the Weapondollar-Petrodollar Coalition once again. But over the longer haul, this fight might prove difficult to win. Unlike in the 1970s and 1980s, the U.S. government can no longer easily instigate, let alone manage, Middle East energy conflicts, particularly against opposition from the ascending Technodollar Coalition. And if this prognosis turns out to be correct, the Middle East might witness yet another significant transformation.

The Israeli occupation of the Palestinian territories, the oppression of Arab populations by military and religious theocracies, and the global spread of Saudi Wahhabism and terrorism have not happened in a vacuum. Over the past half century, these activities aligned with and were in turn supported by the Weapondollar-Petrodollar Coalition. And if the power of this coalition continues to slide, that slide might spell the demise of Israel’s occupation of Palestine and a major shakeup of many of the region’s oligarchies.

Acknowledgments

Research for this paper was partly supported by the SSHRC.

References

- Baran, P. A., and P. M. Sweezy. 1966. *Monopoly capital. An essay on the American economic and social order*. New York: Modern Reader.
- Bejsky, M., V. Ziller, Z. Hirsh, Z. Sarnat, and D. Friedman. 1986. *Vaadat Hakira Le’eenian Visut Menayot Habankim, Din Veheshbon* [Report of the commission of inquiry into the manipulation of the banking shares]. Jerusalem.
- Bey, E. 1932. *Blood and oil in the Orient*. Trans. E. Talmey. New York: Simon and Schuster.
- Bichler, S. 1986. *Hakalkala Hapolitit Shel Habitahon Haleumi Be’Israel: Cama Aspectim Be’pe’ilutan Shel Kvutsot Hahon Hadominantiot* [The political economy of national security in Israel: Several aspects of the activities of dominant capital groups]. M.A. diss., Department of Political Science, Hebrew University.

- . 1991. *Hakalkala Hapolitit Shel Hotzaot Habitahon Be'Israel* [The political economy of military spending in Israel]. Ph.D. diss., Department of Political Science, Hebrew University.
- Bichler, S., and J. Nitzan. 1996a. Military spending and differential accumulation: A new approach to the political economy of armament; The case of Israel. *Review of Radical Political Economics* 28 (1): 51–95.
- . 1996b. Putting the state in its place: US foreign policy and differential accumulation in Middle-East “Energy Conflicts.” *Review of International Political Economy* 3 (4): 608–61.
- . 2004. Dominant capital and the new wars. *Journal of World-Systems Research* 10 (2): 255–327.
- . 2007. Israel’s roaring economy. *Global Research*, 6 July. <https://www.globalresearch.ca/israel-s-roaring-economy/6234>.
- . 2009. Capital as power: Toward a new cosmology of capitalism. Paper presented at the seventh Rethinking Marxism International Gala Conference, 5–8 November, University of Massachusetts Amherst.
- . 2012. Capital as power: Toward a new cosmology of capitalism. *Real-World Economics Review* 61 (September): 65–84.
- . 2015. Still about oil? *Real-World Economics Review* 70 (February): 49–79.
- Bichler, S., J. Nitzan, and R. Rowley. 1989. *The political economy of armaments*. Department of Economics Working Paper 7/89, McGill University, Montreal.
- Bichler, S., R. Rowley, and J. Nitzan. 1989. *The Armadollar-Petrodollar Coalition: Demise or new order?* Department of Economics Working Paper 11/89, McGill University, Montreal.
- Braverman, H. 1998 (1974). *Labor and monopoly capital: The degradation of work in the twentieth century*. 2d ed. New York: Monthly Review.
- Farjoun, E. 1978. Hapoalim Hafalestinim. Tzva Meeluim Calcali [The Palestinian workers: An economic reserve army]. Hebrew. *Red Papers*, no. 5.
- . 1980. The Palestinian workers in Israel: A reserve army of labour. *Khamsin*, no. 7: 107–43.
- . 1983. Class division in Israeli society. *Khamsin*, no. 10: 29–39.
- Gold, D. A. 1977. The rise and fall of the Keynesian coalition. *Kapitalistate* 6 (1): 129–61.
- Huberman, L. 1961 (1936). *Man’s worldly goods. The story of the wealth of nations*. New York: Monthly Review.
- Kalecki, M. 1972. *The last phase in the transformation of capitalism*. New York: Modern Reader.
- . 1971. *Selected essays on the dynamics of the capitalist economy, 1933–1970*. Cambridge: Cambridge University Press.
- . 1972. *The last phase in the transformation of capitalism*. New York: Monthly Review.
- Leontief, W. 1982. Academic economics. *Science*, n.s., 217 (4555): 104, 107.
- . 1983. Academic economics continued. *Science*, n.s., 219 (4587): 904, 907.
- Magdoff, H. 1969. *The age of imperialism: The economics of U.S. foreign policy*. 1st ed. New York: Monthly Review.
- . 1972. *Imperialism: From the colonial age to the present; Essays by Harry Magdoff*. New York: Monthly Review Press.
- Magdoff, H., and P. M. Sweezy. 1987 (1983). *Stagnation and the financial explosion*. New York: Monthly Review.
- Melman, S. 1974. *The permanent war economy. American capitalism in decline*. New York: Simon and Schuster.
- Nitzan, Jonathan. 1986. *Holding groups and the Israeli economy*. M.A. diss., Department of Economics, McGill University.
- . 1989. *Price and quantity measurements: Theoretical biases in empirical procedures*. Department of Economics Working Paper 14/1989, McGill University, Montreal.

- Nitzan, J., and S. Bichler. 1995. Bringing capital accumulation back in: The Weapondollar-Petrodollar Coalition: Military contractors, oil companies and Middle-East "Energy Conflicts." *Review of International Political Economy* 2 (3): 446–515.
- . 1996. From war profits to peace dividends: The new political economy of Israel. *Capital & Class* 20 (3): 61–94.
- . 1997. From war profits to peace dividends: Depth and breadth in Israeli differential accumulation. *Research Institute for European Studies* 35 (March): 1–42.
- . 2000. Inflation and accumulation: The case of Israel. *Science & Society* 64 (3): 274–309.
- . 2001. Going global: Differential accumulation and the great u-turn in South Africa and Israel. *Review of Radical Political Economics* 33 (1): 21–55.
- . 2002. *The global political economy of Israel*. London: Pluto.
- . 2006a. "Cheap wars": The economy of the occupation. *Socioeconomic Bulletin*, no. 10 (September).
- . 2006b. New imperialism or new capitalism? *Review* 29 (1): 1–86.
- . 2009. *Capital as power. A study of order and creorder*. New York: Routledge.
- Nitzan, J., R. Rowley, and S. Bichler. 1989. *Changing fortunes: Armaments and the U.S. economy*. Department of Economics Working Paper 8/89, McGill University, Montreal.
- Orr, A., and M. Machover. 1961. *Shalom, Shalom Ve'ein Shalom [Peace, peace and no peace]*. Jerusalem: Self-published.
- . 2009. *Peace, peace, when there is no peace (Israel and the Arabs 1948–1961)*. Trans. M. Marshall. Self-published.
- Rowley, R., S. Bichler, and J. Nitzan. 1988. *Some aspects of aggregate concentration in the Israeli economy, 1964–1986*. Department of Economics Working Paper 7/88, McGill University, Montreal.
- . 1989. *The Armadollar-Petrodollar Coalition and the Middle East*. Department of Economics Working Paper 10/89, McGill University, Montreal.
- Steindl, Josef. 1945. *Small and big business: Economic problems of the size of firms*. Oxford: Basil Blackwell.
- . 1976 (1952). *Maturity and stagnation in American capitalism*. New York: Monthly Review.
- . 1984 (1979). Stagnation theory and stagnation policy. In *The faltering economy: The problem of accumulation under monopoly capitalism*, ed. J. B. Foster and H. Szlajfer, 179–97. New York: Monthly Review.
- Tsuru, S., ed. 1956. *Has capitalism changed? An international symposium on the nature of contemporary capitalism*. Tokyo: Iwanami Shoten.
- U. S. National Security Council. 1950. *NSC 68: United States objectives and programs for national security. A report to the president pursuant to the president's directive of January 31, 1950; Top secret*. Washington, D.C.