

The Shifting Balance in the World Oil Market

The balance of forces in the world petroleum market has tilted in favor of the consuming countries. Recently both demand and supply changes have put downward pressure on oil prices. While the world recession has been an obvious factor behind the weakness of demand, the impressive energy savings of the big oil users are less widely appreciated. The rise in retail product prices was faster and more sustained following the second oil crisis than after the first price shock in 1974. Governments in the major countries took steps to promote conservation by raising taxes on oil consumption or by removing price controls. On top of these longer run factors, stocks of crude oil and petroleum products held in the industrial countries declined from their high levels reached in the wake of the oil market disruptions of 1979-80 and thus added to available supplies.

The squeeze on prices stemming from recession, conservation, and destocking was aggravated in recent months by increased sales into an already weak market from some Organization of Petroleum Exporting Countries (OPEC) members. Over the near term, the market is likely to remain soft. Excess capacity among OPEC producers is high. For many oil exporters, prospects of worsened payments positions are generating pressures to raise revenues through expanded sales.

Recent market conditions

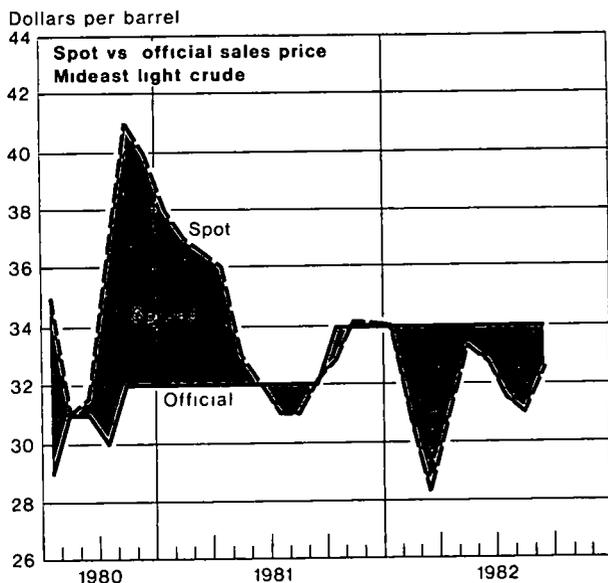
Oil prices began their retreat from heady levels late in 1980, as business activity in the industrial economies weakened and consumers pushed their efforts to conserve on petroleum use. By the middle of 1981

the spread that spot market oil commanded over OPEC official prices had disappeared (Chart 1). Despite this, OPEC members still saw an improvement in their terms of trade in 1981, as a rising dollar in the exchange markets more than offset slipping premiums on oil prices. This terms-of-trade strengthening, together with higher interest earnings on assets, helped oil exporters mitigate the payments effects of lower oil sales volumes.

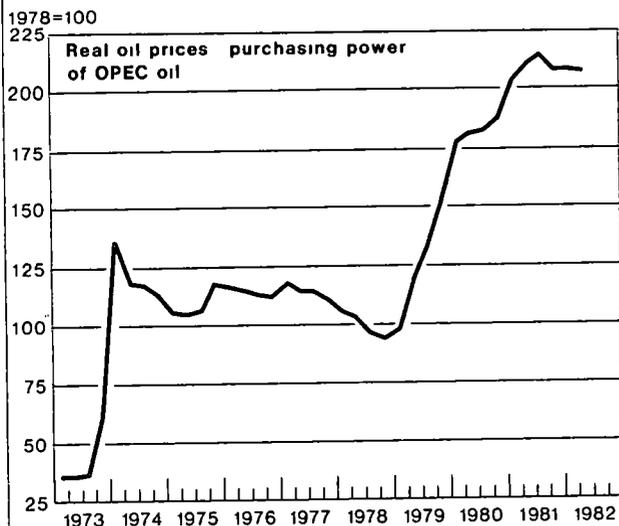
By the start of 1982, however, rundowns of oil stocks in the industrial nations added to the downward demand pressures of continuing recession and conservation. The slump in production and sales worsened, and large discounts appeared in the spot market. Faced with an oil market glut, OPEC ministers met in emergency session last March 19 and agreed to production limits with a ceiling on total OPEC output of 17.5 million barrels per day. Spot prices did firm in April and May but, to achieve these gains, producers led by Saudi Arabia had to keep output well below the ceiling levels. This success was short-lived. Some oil exporters facing payments problems began to increase oil sales to raise revenues. By June and July, OPEC output had reached the 18½ million barrels per day range, well above the agreed ceiling and over 2 million barrels per day above the April production level (Chart 2). With demand in the consuming states still weak, this surge in output kicked off renewed price slides. Spot market discounts in August approached the levels of early 1982 before firming a bit most recently, as Saudi Arabia again cut back production.

Chart 1

Market prices for petroleum have fallen sharply over the past two years . . .



. . . but oil exporters were spared a decline in their terms of trade because of the strength of the dollar in the foreign exchange markets.



Index represents the production-weighted average of dollar contract prices for OPEC oil, divided by a weighted average of wholesale prices in dollar terms (OPEC import share weights) for the seven major trading countries: United States, Germany, Japan, Canada, United Kingdom, France, and Italy

Conservation: twice burned, finally shy?

Efforts to save on energy use have been an important factor behind the shifting balance in the petroleum market. Decreases in oil demand because of a weak economy or inventory declines are cyclical changes that will reverse as business recoveries unfold. Reductions of demand that stem from conservation in the use of oil, however, are a more lasting feature of adjustment. The energy savings (measured by the ratio of total consumption of petroleum products to real gross national product) in the industrial countries following the second oil shock are, therefore, a heartening sign (Chart 3). Such conservation gains also occurred after the OPEC price hikes in 1974, but the recent economies in petroleum use differ in two ways. First, they have come about in part because consuming-country governments were more willing this time to pass increased oil costs on to final users, particularly in the form of higher retail gasoline prices, than they were earlier (Chart 4). Second, recent conservation gains appear to be more widespread across consuming countries and of the same size or even slightly larger than previous energy savings, despite a smaller percentage OPEC price jump in 1979 than in 1974.

The mechanisms for passing higher oil costs onto consumers varied across countries. Still, a relatively quick response in retail oil prices was true for all the major countries, both those having a basically free market approach and those having price controls on petroleum products. The United States accelerated the pace of oil price decontrol, freeing prices completely by early 1981. France and Italy use a system of administered petroleum prices, but these were raised faster in the period following the second oil price rise than after the earlier shock. In Canada, the National Energy Policy of 1981 permits "new" oil prices to rise quickly in line with market prices. Japan still has administered price ceilings, but there is an effort to phase these out.

Some countries reinforced the rise in market prices with tax increases on petroleum use, notably in transportation (Chart 5). Taxes are a large part of the final price of gasoline in European countries. And these countries generally raised gasoline taxes more forcefully since 1979 than they did after the first OPEC price rise. Tax increases were most evident in the United Kingdom and in Italy, which has one of the highest gasoline user taxes in the world. On the other hand, in the United States, the largest oil consumer, gasoline taxes have not changed and have declined sharply as a proportion of final price.

Price incentives to conserve on gasoline use have been supplemented by tightened fuel-efficiency stan-

dards for automobiles. These standards are mandatory in the United States and Japan, while voluntary guidelines are in place in Canada, Germany, and the United Kingdom

The outlook

The recent actions of governments to pass higher oil costs through to motorists mark an important change in conservation efforts. But adjustments to the OPEC challenge encompass more than savings on oil use in transport. Most countries have financial incentives or quantitative standards to promote the insulation of buildings, fuel switching, and the development of alternative energy sources. These efforts to conserve on oil use and to encourage new energy sources will work to restrain world oil prices in the early stages of economic recovery.

In the near term, supply conditions will tilt in the same direction. Excess capacity among oil producers is large enough to absorb most of the likely supply disruptions. For example, idle capacity for OPEC producers outside the Gulf area exceeds 3 million barrels per day. That amount basically covers the current output of Iran and Iraq, where continuing warfare raises a constant threat of upsetting oil industry operations. Furthermore, the worsening payments positions of most oil exporters, both within and outside OPEC, will spur sales of crude as a quick way to raise cash. The recent advance purchase of Mexican oil for the United States Strategic Petroleum Reserve highlights this point.

But the success of adjustments to expensive oil cannot be correctly judged by the state of the market near

the trough of an international recession. The big jumps in oil prices in late 1973 and 1979 happened at points near the peaks of world economic activity. To minimize the chances of yet another shock, still more savings in oil use must be made during the course of economic recovery. While the medium-term outlook is promising, success is far from assured; the current market balance can hardly be considered a permanent feature of the world oil market. In fact, conservation gains seem to have slowed down or leveled off lately in the United States, Germany, and the United Kingdom (Chart 3). It is probably not a coincidence that the relative price of gasoline in these same countries recently declined from peak levels as well (Chart 4).

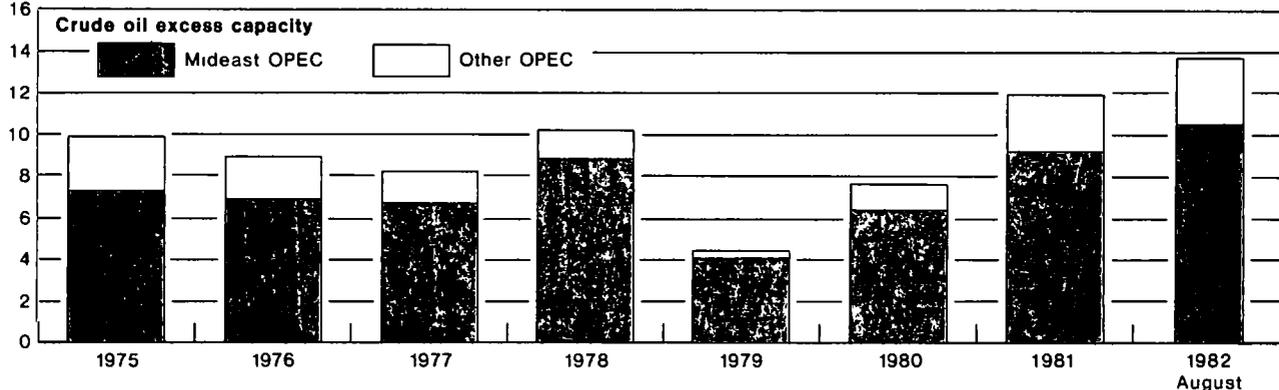
Transportation is the largest use of petroleum in the industrial world. Because of the limited scope for fuel switching, energy policies in this area must rely chiefly on promoting conservation. Experience to date with price incentives and fuel-efficiency standards shows that conservation can bite in the transport sector. And more savings are in store as the large stock of older, less fuel-efficient cars is replaced by newer models. However, a good portion of the hard-won gains in oil usage could be lost if cyclical declines in world oil prices are passed on too quickly to the retail level, setting the stage for a swing back in oil market balance later when the industrial economies are more fully utilized. This possibility argues for serious consideration of more policy efforts by consuming-country governments—in particular, increased gasoline taxes by low-tax countries and mandatory fuel-efficiency standards by countries that now lack them.

Edward J. Frydl and William A. Dellalfar

Chart 2

Excess capacity among OPEC producers has grown considerably, however . . .

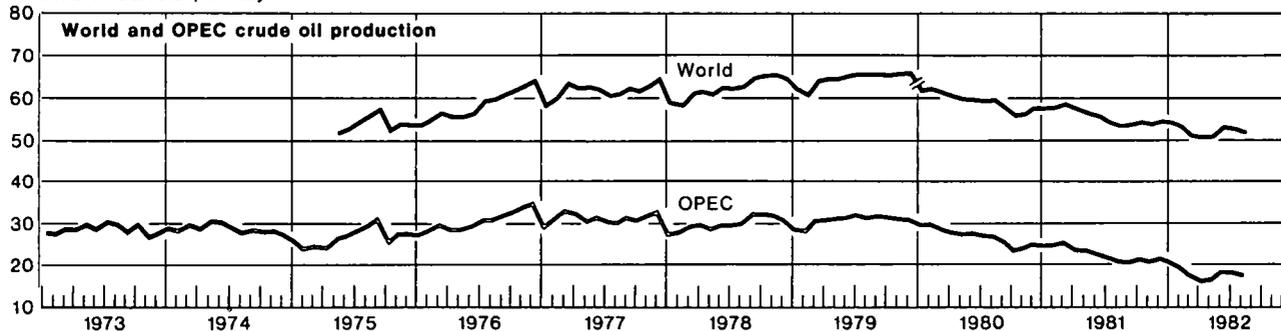
Millions of barrels per day



Source: Petroleum Intelligence Weekly

. . . as worldwide demand for petroleum has fallen.

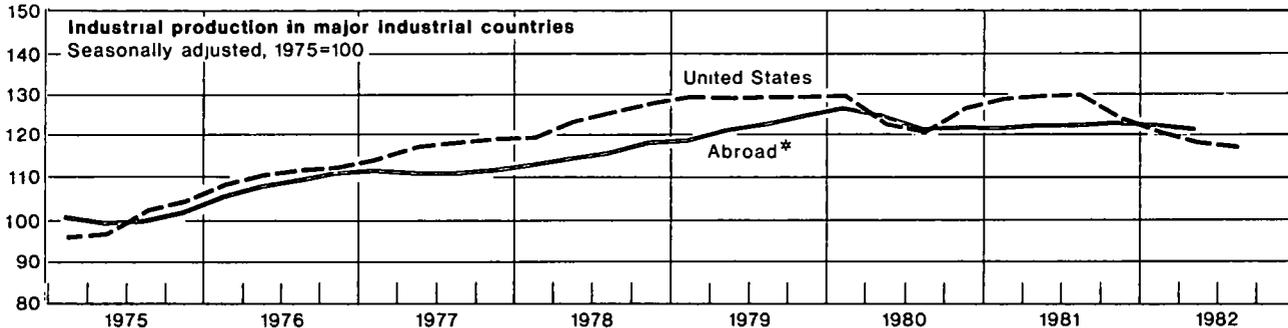
Millions of barrels per day



Sources: Petroleum Economist, Petroleum Intelligence Weekly

The recession in the industrial world has, of course, been a factor behind the weakness of demand in the oil market . . .

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* Weighted average for Canada, France, Germany, Italy, Japan, and the United Kingdom

Chart 3

Oil Consumption in Industrial Countries, 1973-82

Ratio of total consumption of petroleum products to real GNP or GDP, four-quarter moving averages

... but conservation has also played an important role. All the major industrial economies show impressive savings in petroleum use since the 1979 oil crisis. In some countries, however--the United States, Germany, and the United Kingdom, in particular--conservation gains appear to have leveled off recently . . .

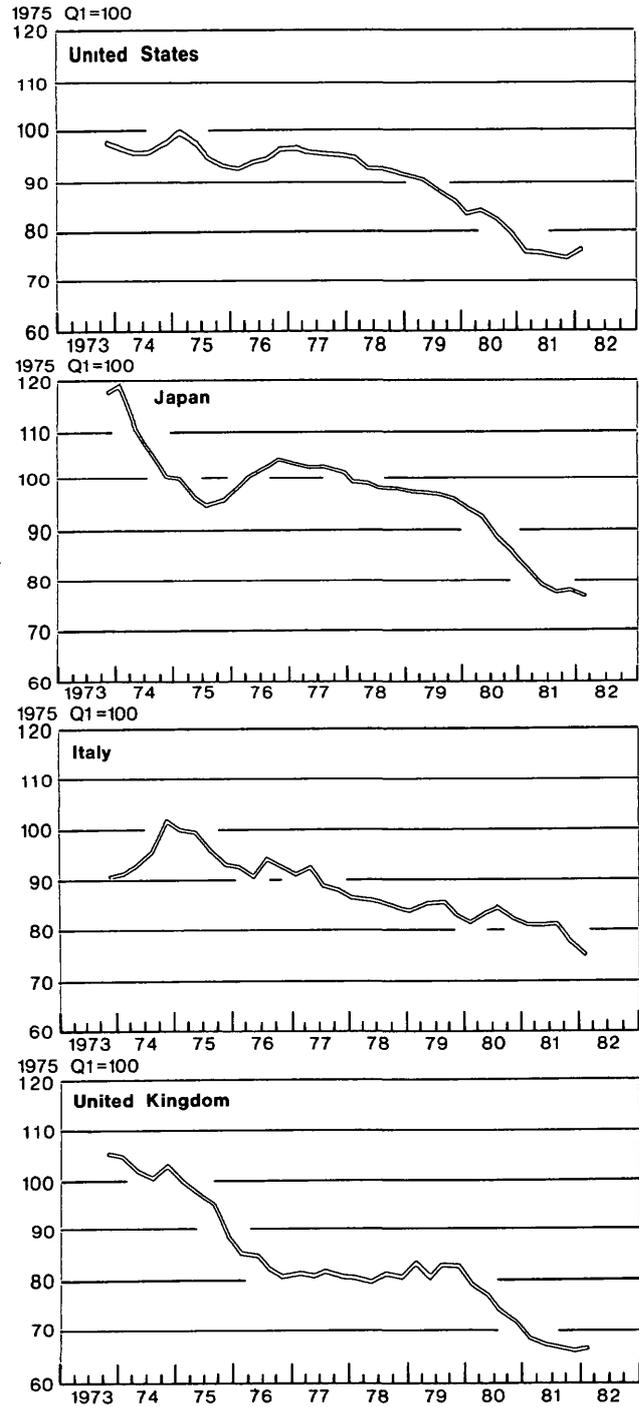
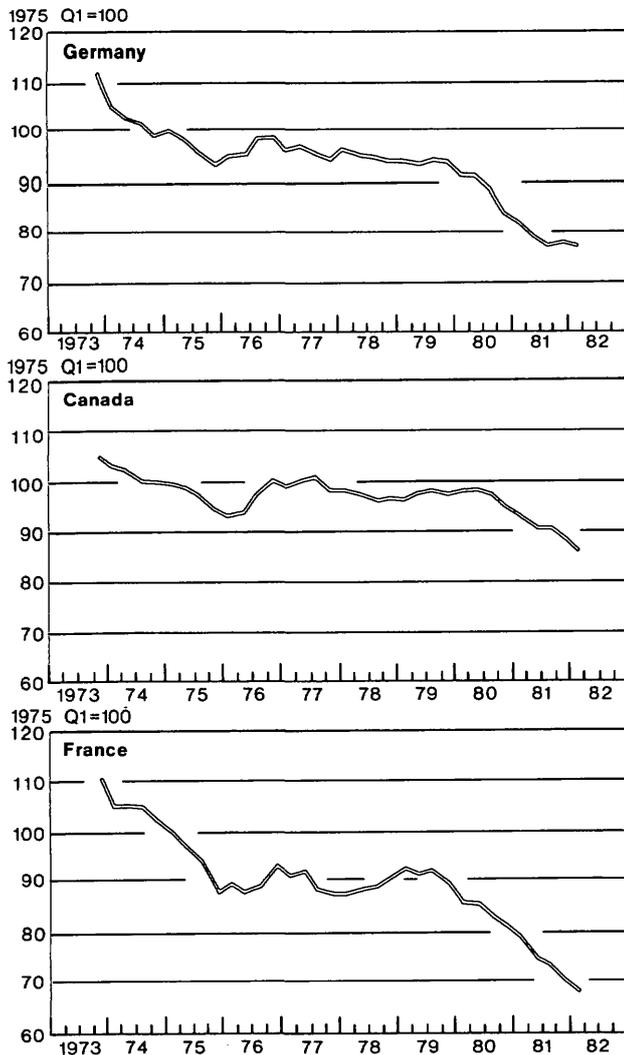


Chart 4

Real Retail Price of Gasoline in Industrial Countries

Retail gasoline price deflated by consumer price index, not seasonally adjusted except for United States

... In these same countries, real gasoline prices have recently come down from their peak levels. Nevertheless, after the second oil shock, governments in the consuming countries did not shelter motorists from higher oil costs as they did following the OPEC price hikes in 1974 ...

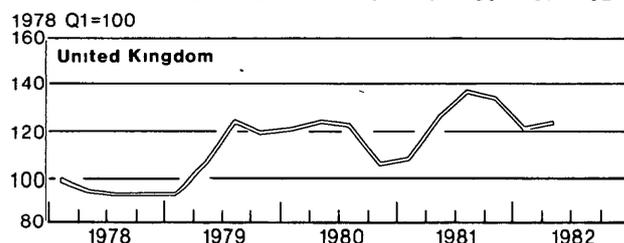
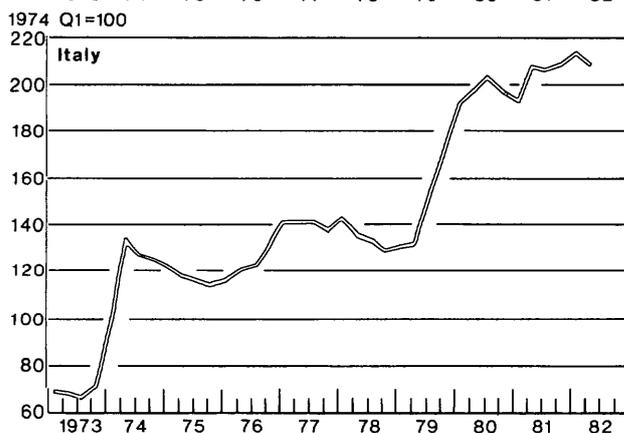
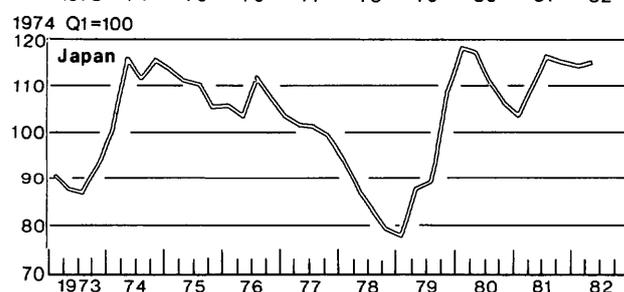
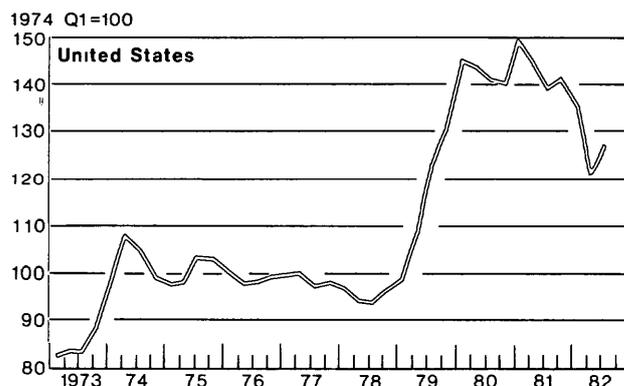
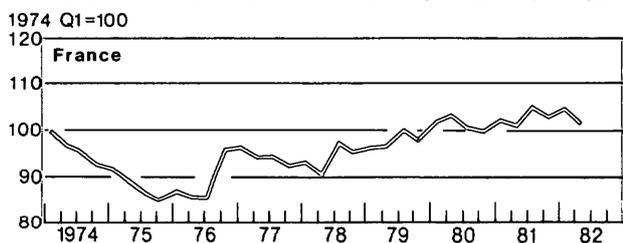
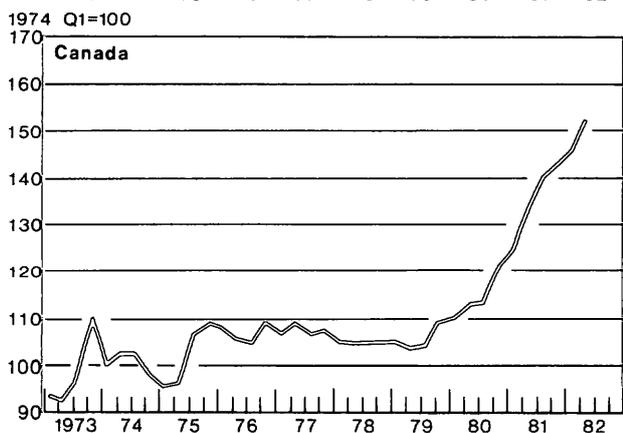
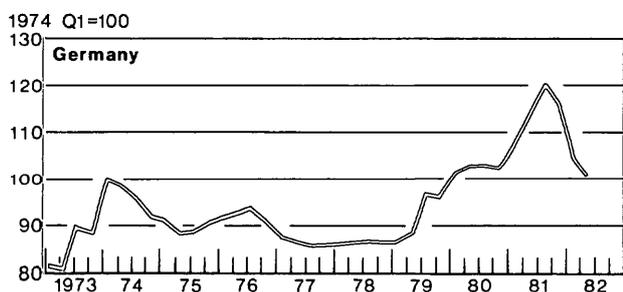
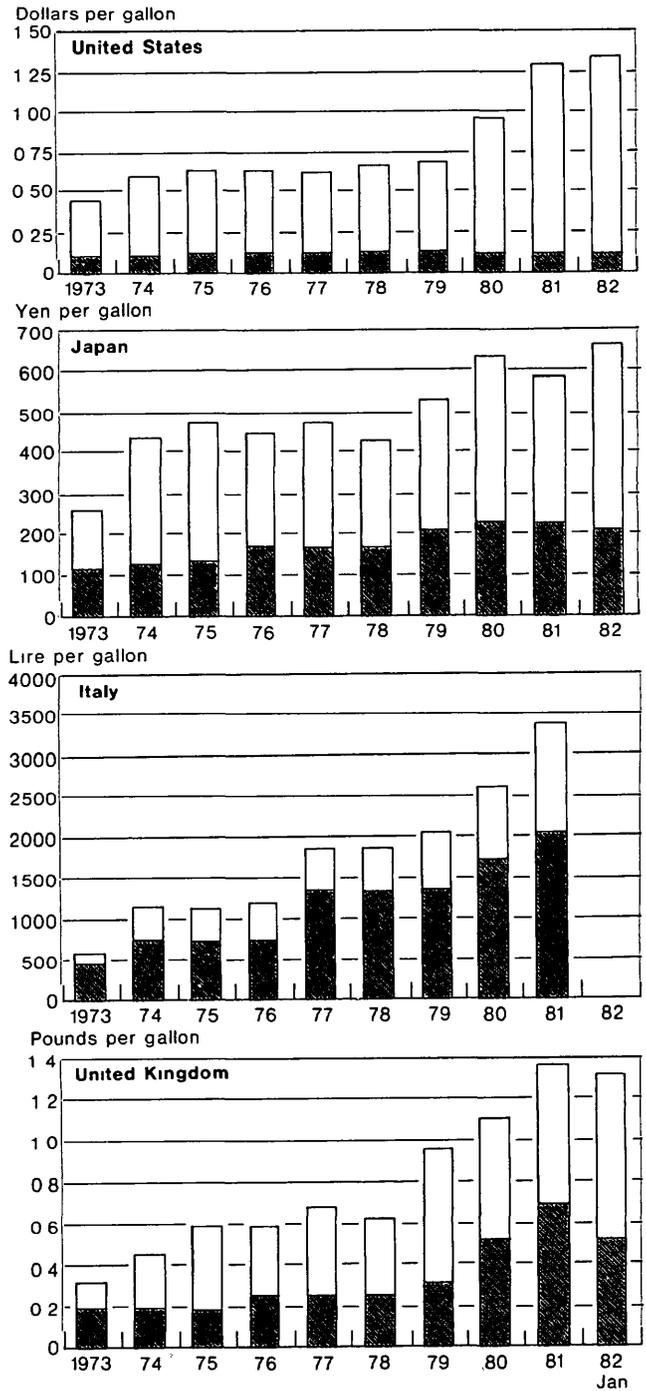
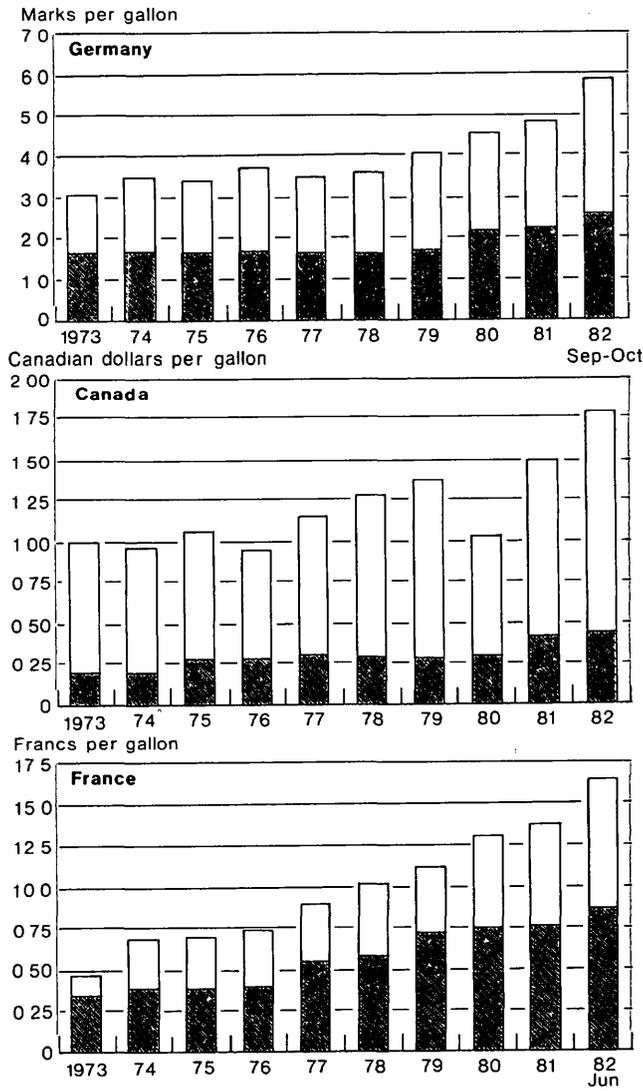


Chart 5

Retail Gasoline Prices and Taxes in Industrial Countries

In domestic currency units per gallon, shaded area represents tax component of price

... In fact, a number of countries have significantly raised the tax component of retail gasoline prices, a step that they generally did not take after the first oil shock. In the United States, the increase in gasoline prices represents the elimination of price controls rather than higher sales taxes.



Note Prices in each year are for the month of July, unless otherwise noted
 Sources Department of Energy and national sources