

Baker Institute's Latin America Initiative and the Energy Forum
Americas Society / Council of the Americas

Energy, Policy and Politics: The Changing Energy Landscape
in Latin America

Venezuela: Oil Sector Performance
1997 - 2008

Ramón Espinasa

Houston - Texas
February 26th 2009

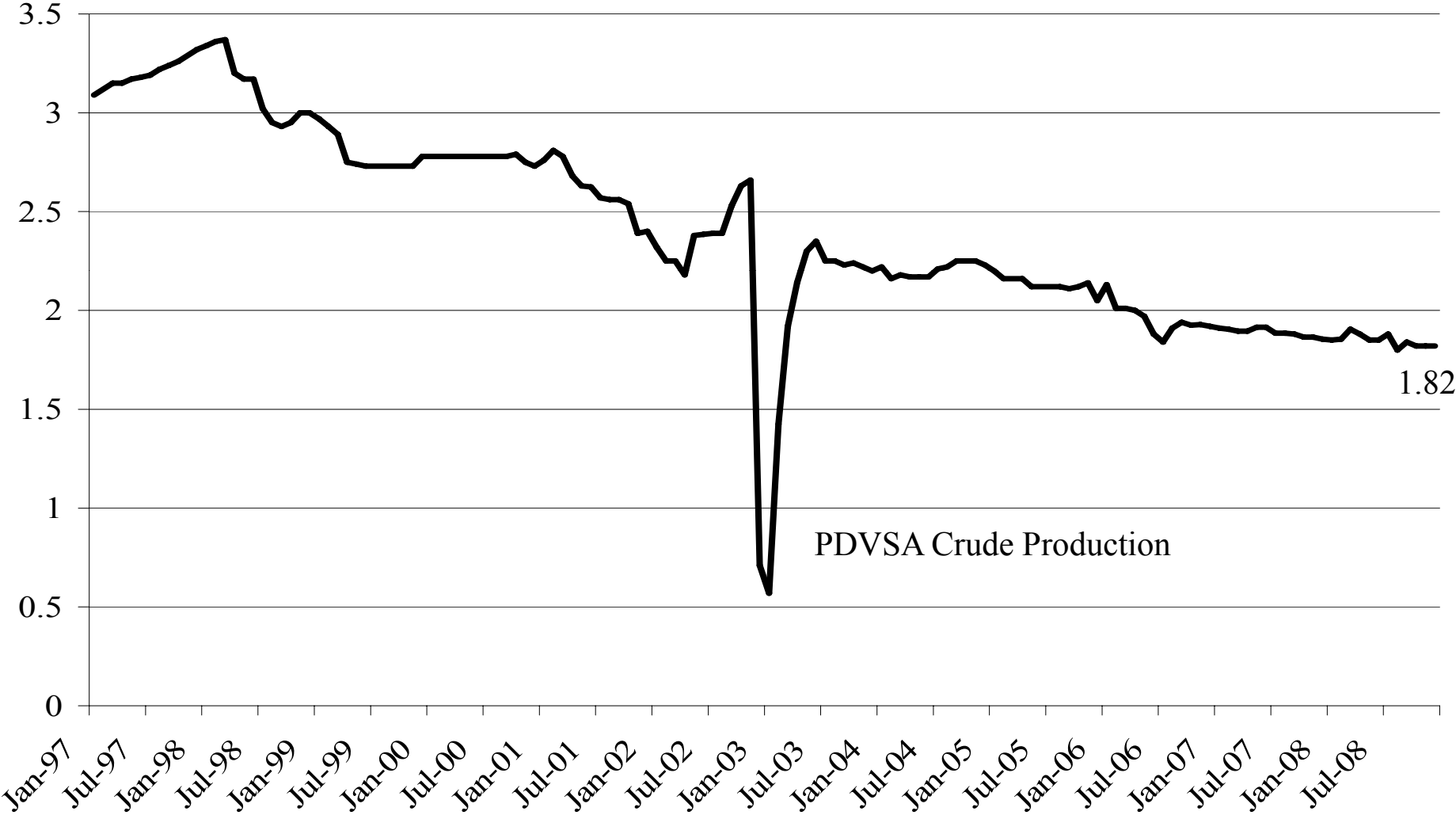
The Facts

1997 - 2008

Crude Oil Production

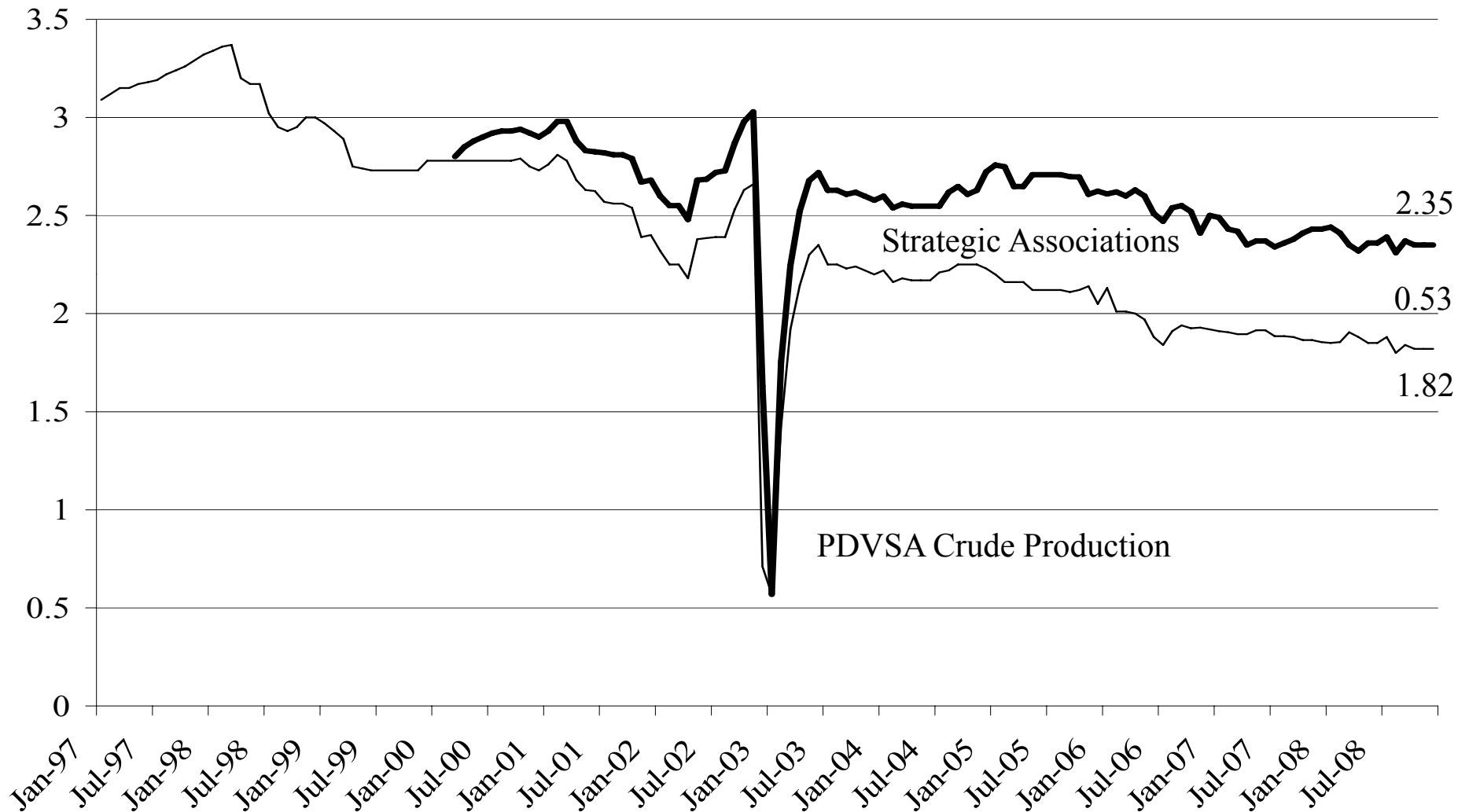
1997 - 2008

According to the IEA, PDVSA own production was in Dec 08 45% lower than in Dec 97.



Source: IEA
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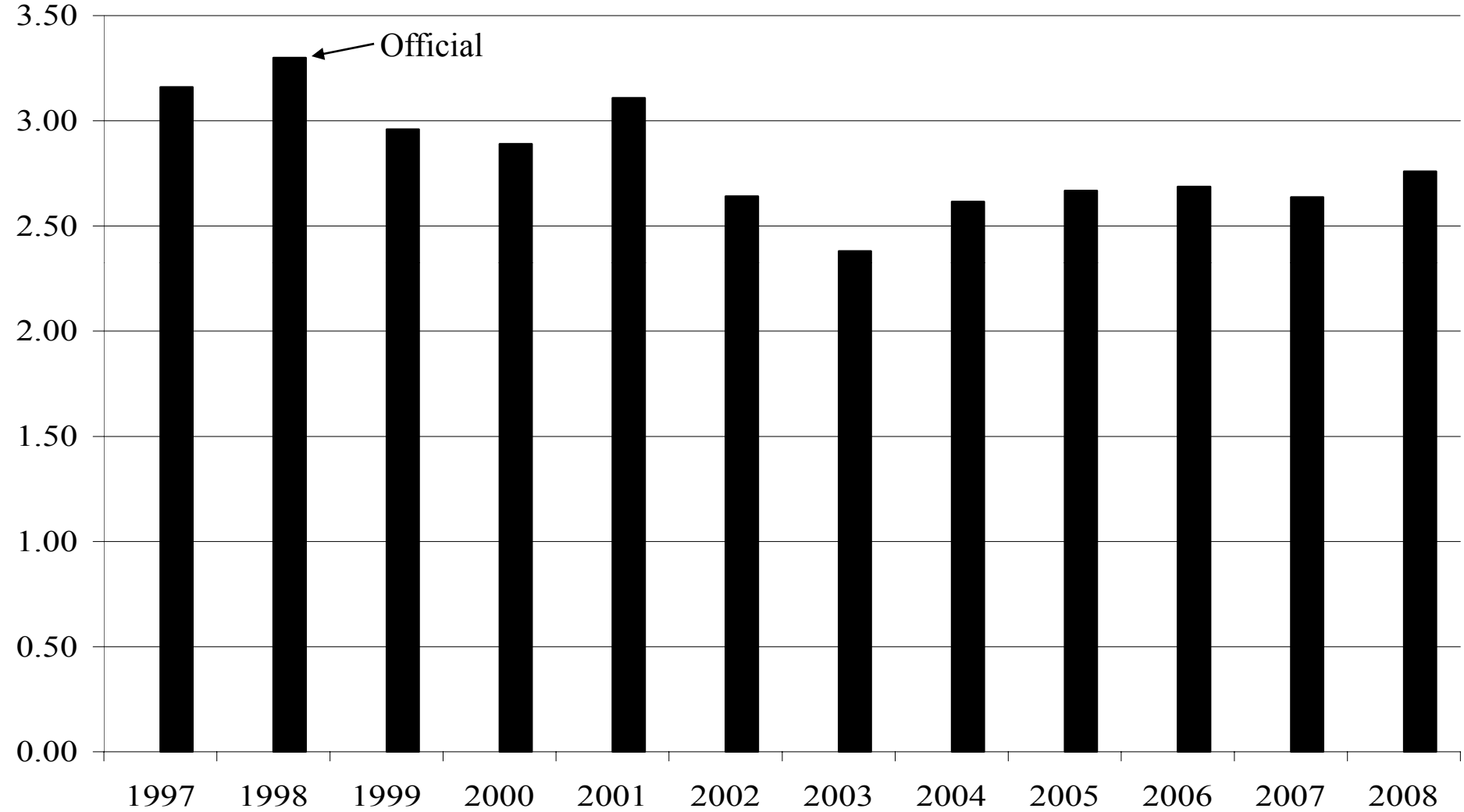
According to the IEA, PDVSA own production was in Dec 08 45% lower than in Dec 97. The drop was partially compensated by the coming on stream of the Strategic Associations. Total production was 30% lower in Dec 08 compared to Dec 97.



Source: IEA

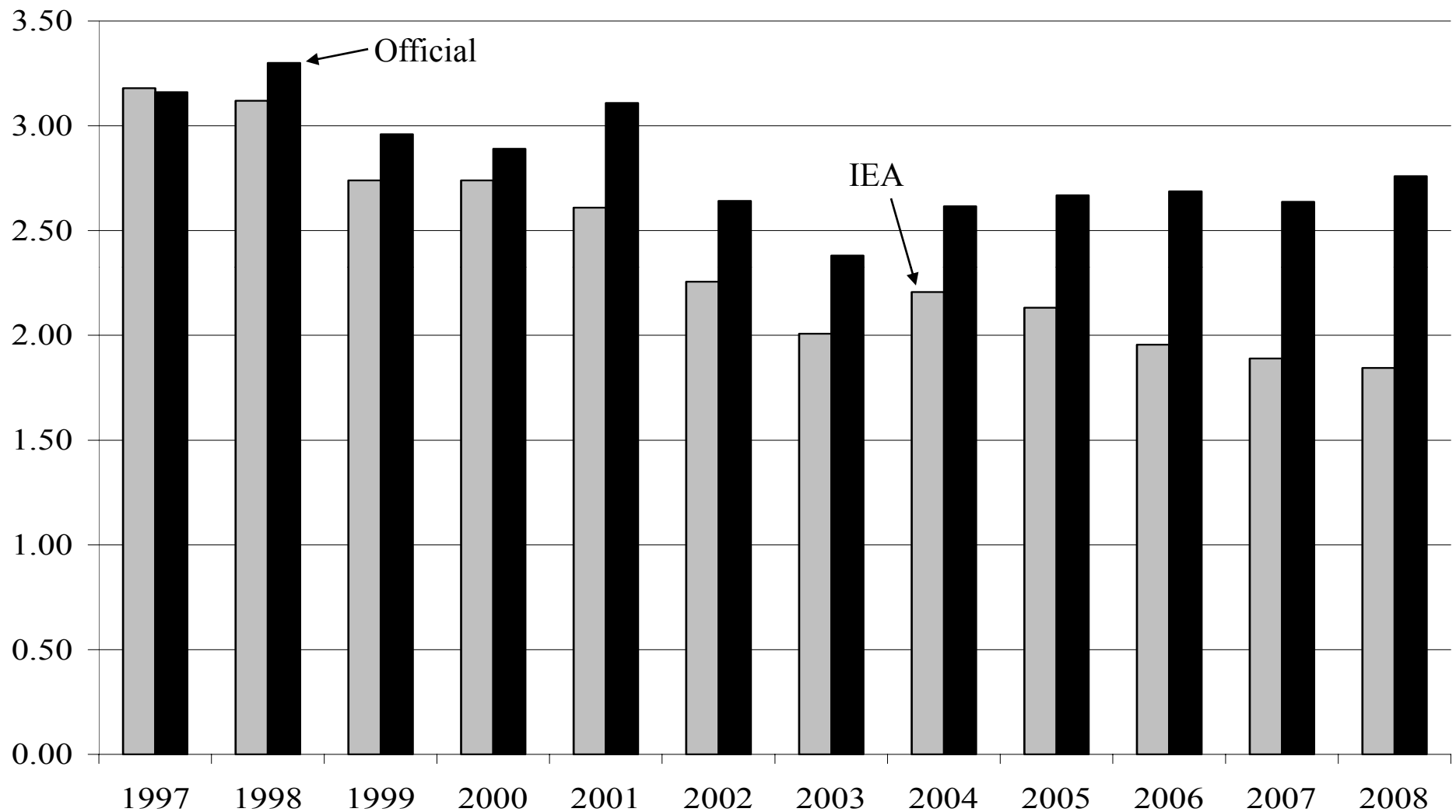
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Official sources report a drop in PDVSA production of 13% between 1997 and 2008



Source: MEM / PDVSA. 2008 is the average up to September.

Official sources report a drop in PDVSA production of 13% between 1997 and 2008, according to the IEA the drop was 42% during the same period.



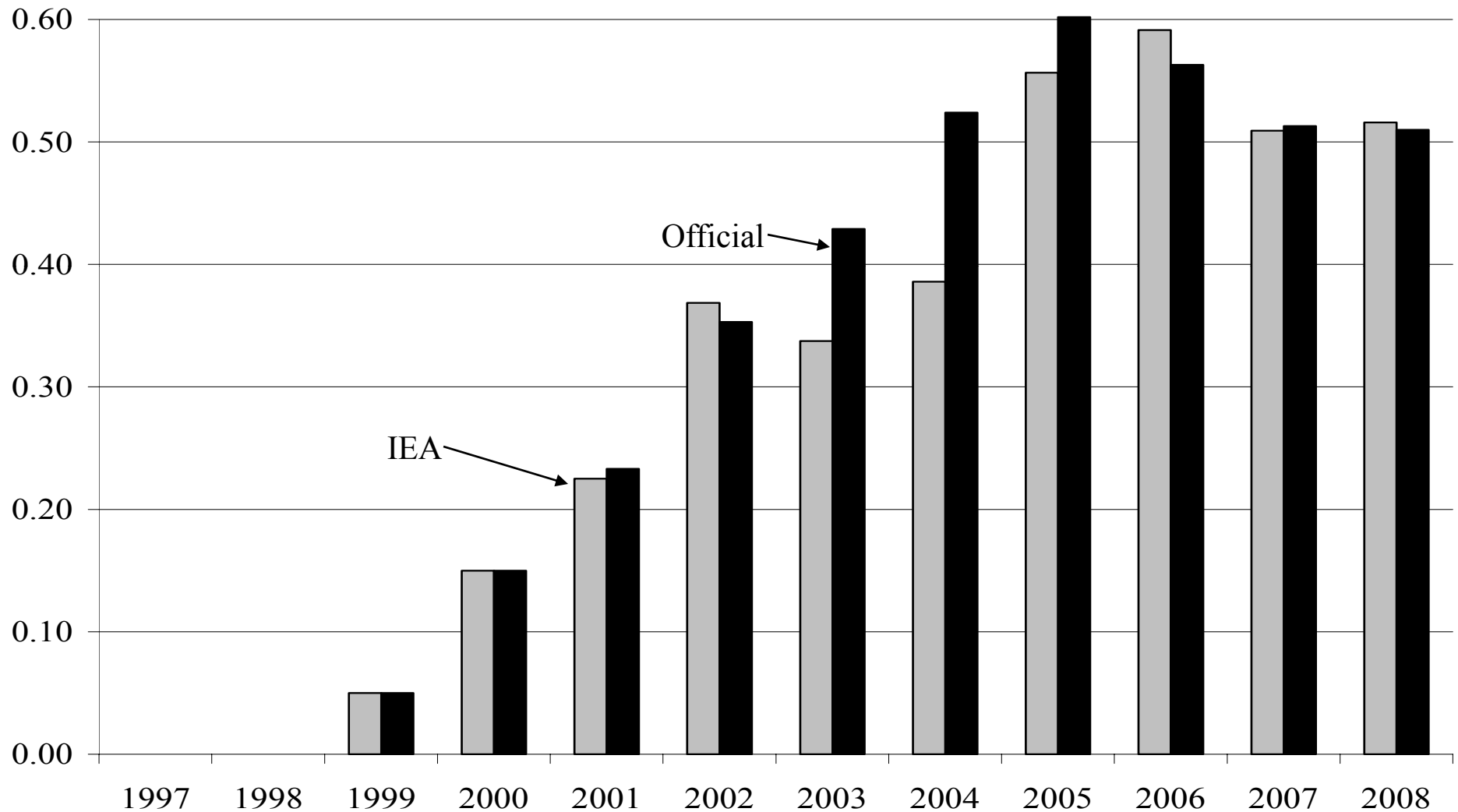
Source: MEM / PDVSA - IEA

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Production from the Strategic Associations is very much the same according to both sources. It reached 0.6 Mbd in 2005 and nowadays is down to 0.5 Mbd.



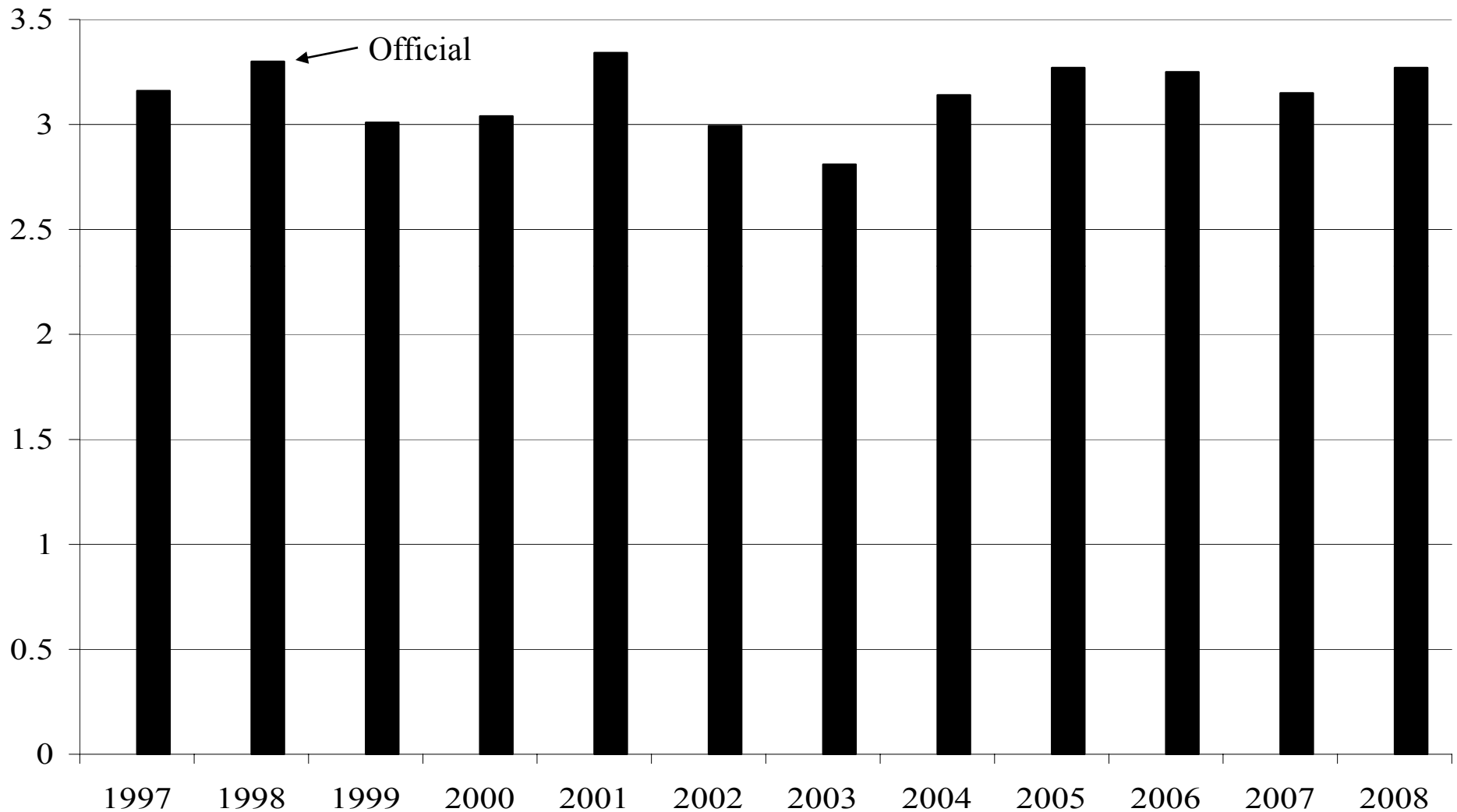
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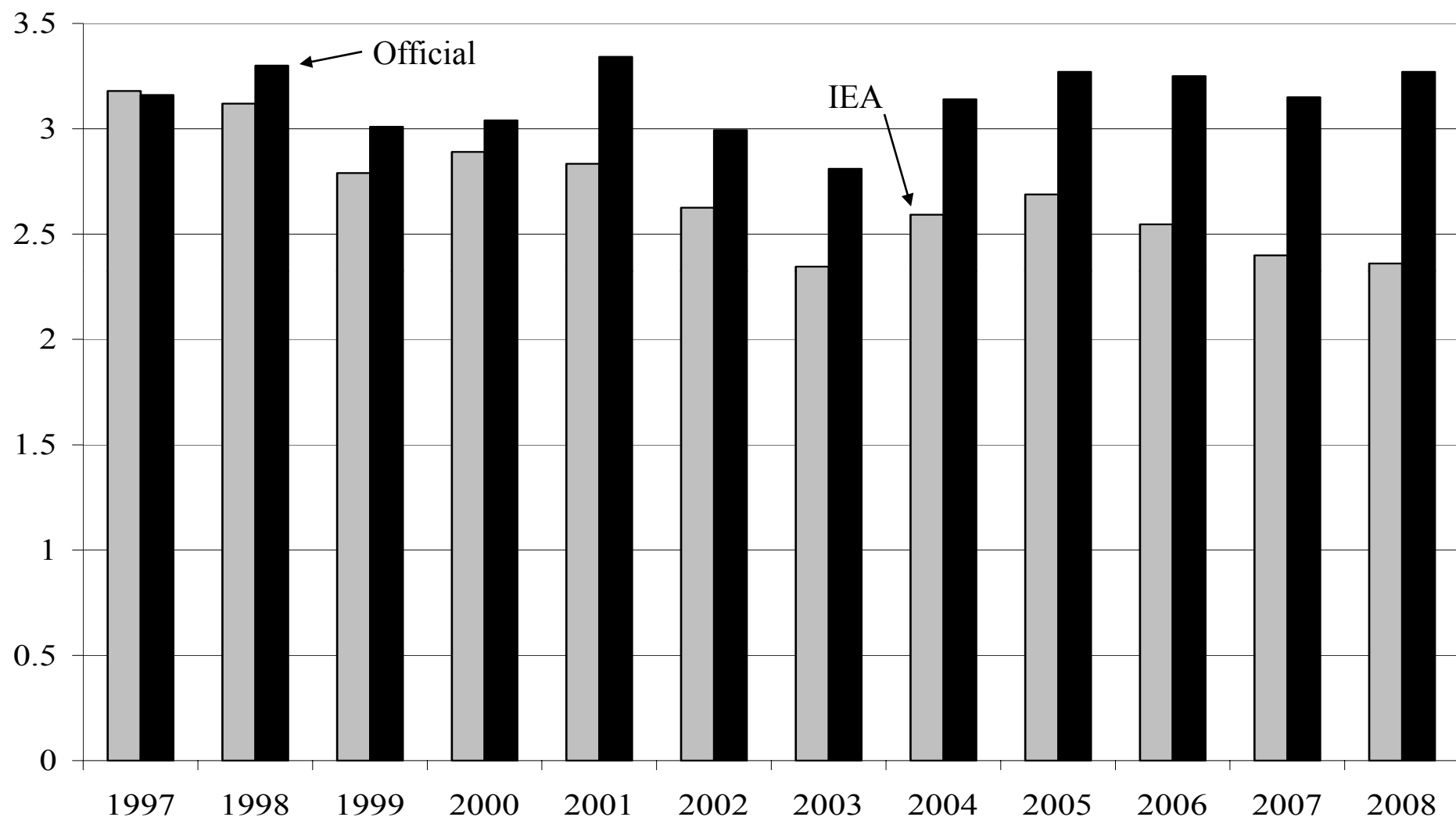
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Adding up PDVSA own production and that of the Strategic Associations, official figures report slightly higher production in 2008 than in 1997



Source: MEM / PDVSA. 2008 is the average up to September.

Adding up PDVSA own production and that of the Strategic Associations, official figures report slightly higher production in 2008 than in 1997, according to the IEA production in 2008 is 26% lower than in 1997 and has declined since 2005.



Source: MEM / PDVSA - IEA

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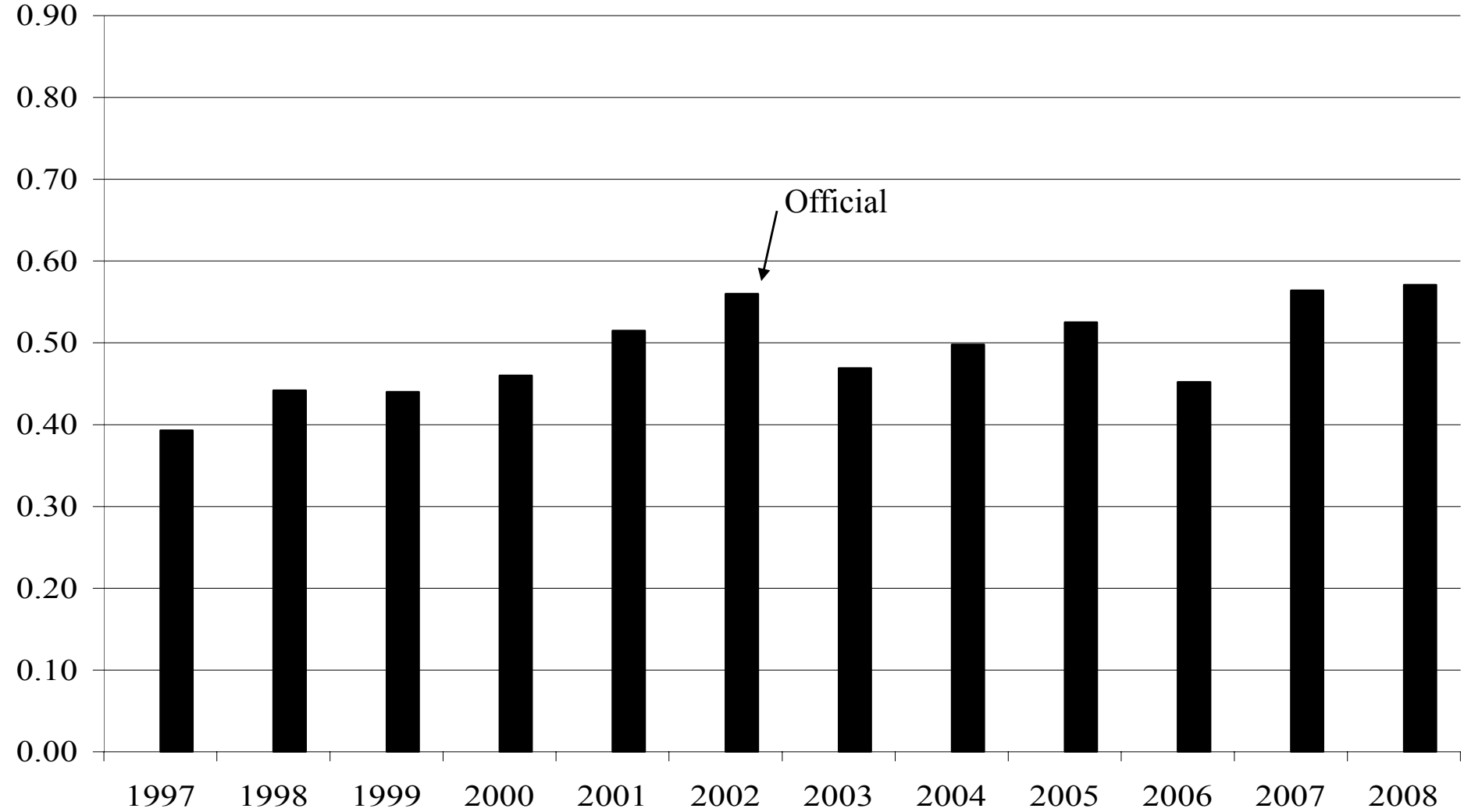
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Domestic Consumption of Oil Products

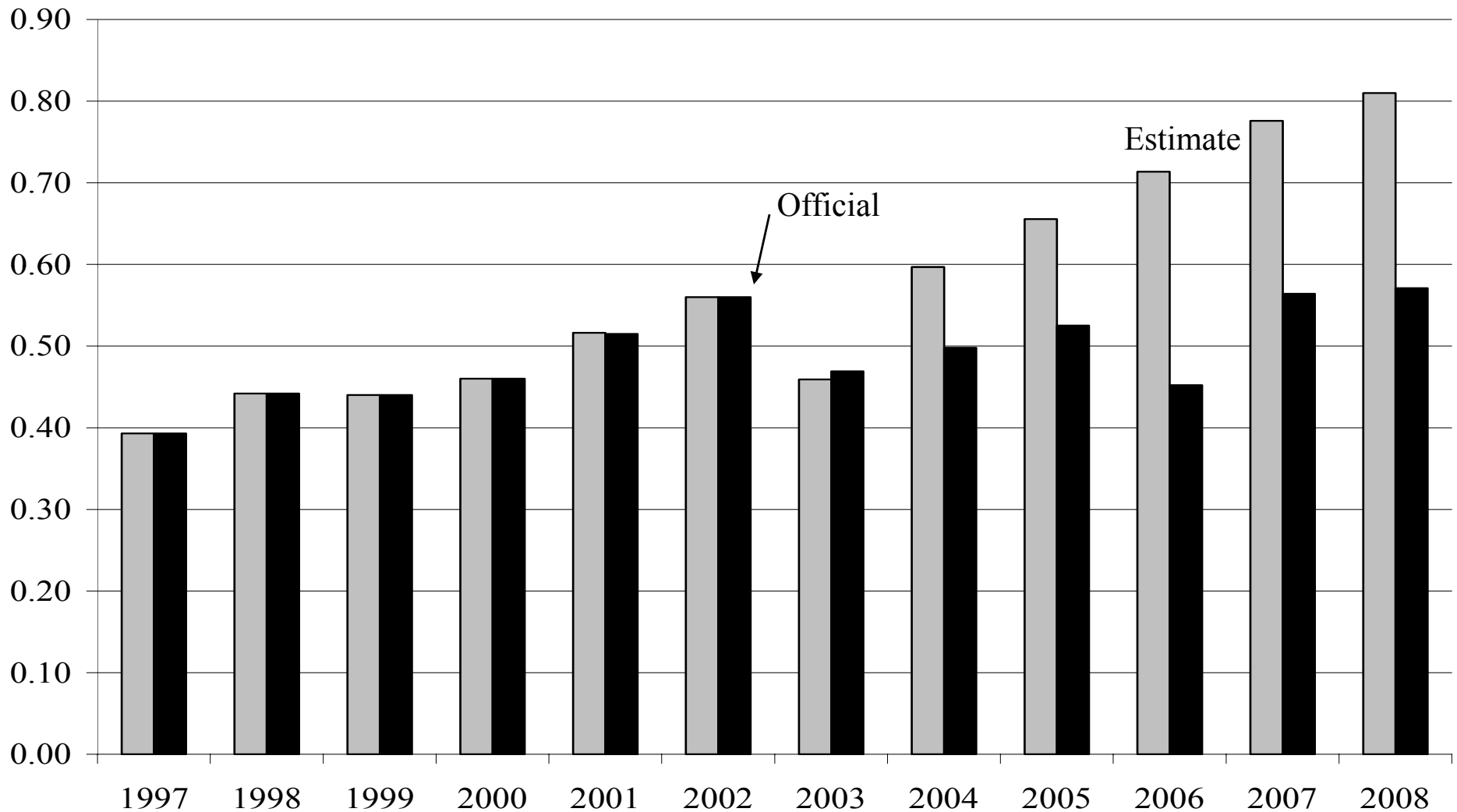
1997 - 2008

According to official figures domestic fuel consumption in 2007 and 2008 was similar to that of 2002



Source: MEM / PDVSA. 2008 is the average up to September.

According to official figures domestic fuel consumption in 2007 and 2008 was similar to that of 2002, assuming that domestic demand grows with domestic activity after 2002 fuel consumption in 2008 could be 40% higher than the official figure.



Source: MEM / PDVSA and own calculations

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There are at least five reasons to believe that fuel consumption in 2008 is closer to the estimated than the official figure:

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Second: The domestic automobile fleet increased 49% during the period and there were no incentives to retire the old fleet.

Third: Gasoline prices remained constant in nominal terms while CPI grew 222% during the period, the relative price of gasoline fell 70%.

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Third: Gasoline prices remained constant in nominal terms while CPI grew 222% during the period, the relative price of gasoline fell 70%.

Fourth: The nominal price remained constant in dollar terms (0.14 \$/g) while the international price increased more than fivefold during the period. The price differential vis-à-vis neighboring countries was between 20 and 30 to one, inducing huge smuggling out of the country.

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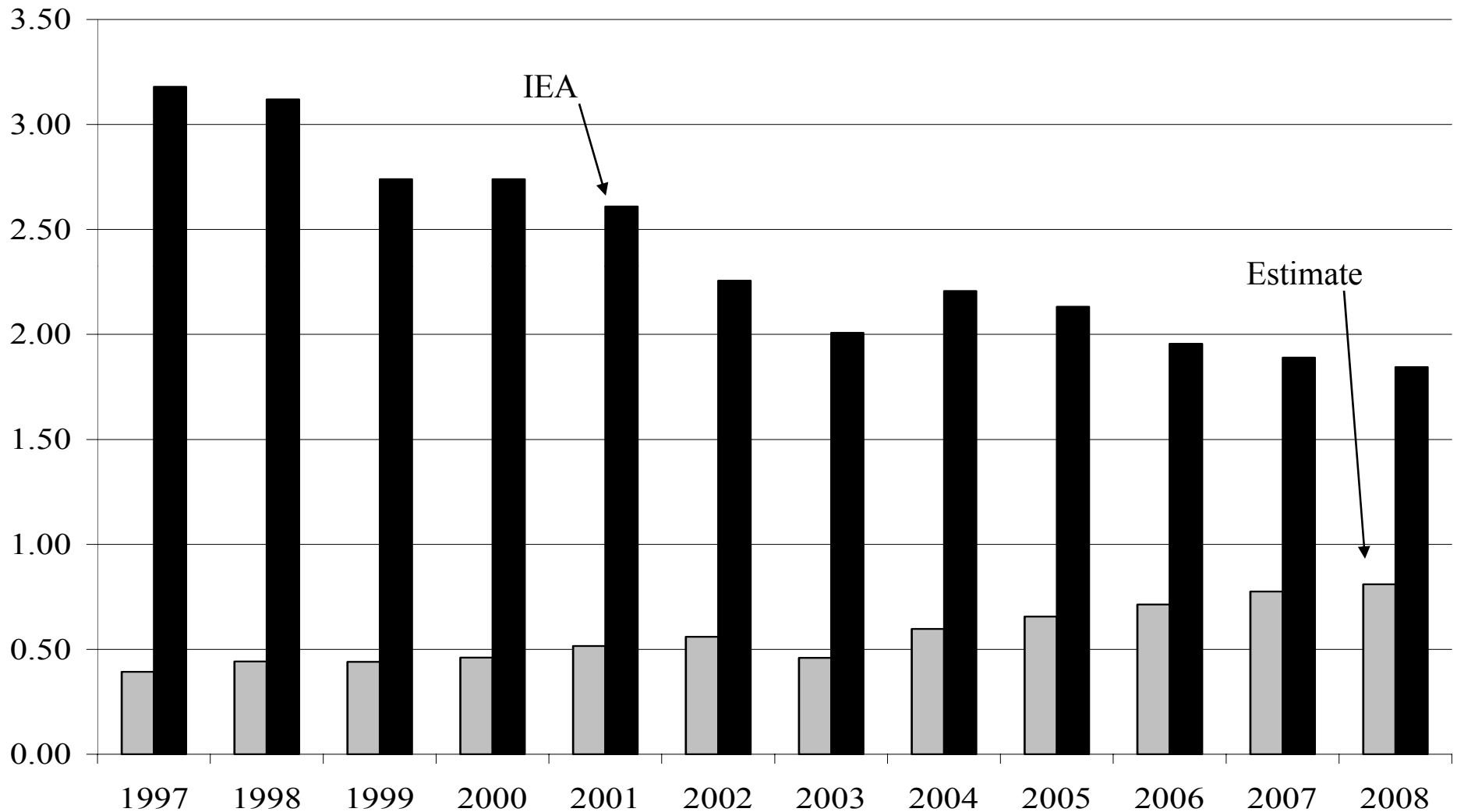
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Fifth: Associated gas production declined with crude output resulting in the burning of sizeable amounts of liquids for thermoelectricity generation in western Venezuela.

Domestic fuel consumption increased twofold while production declined 42% between 1997 and 2008



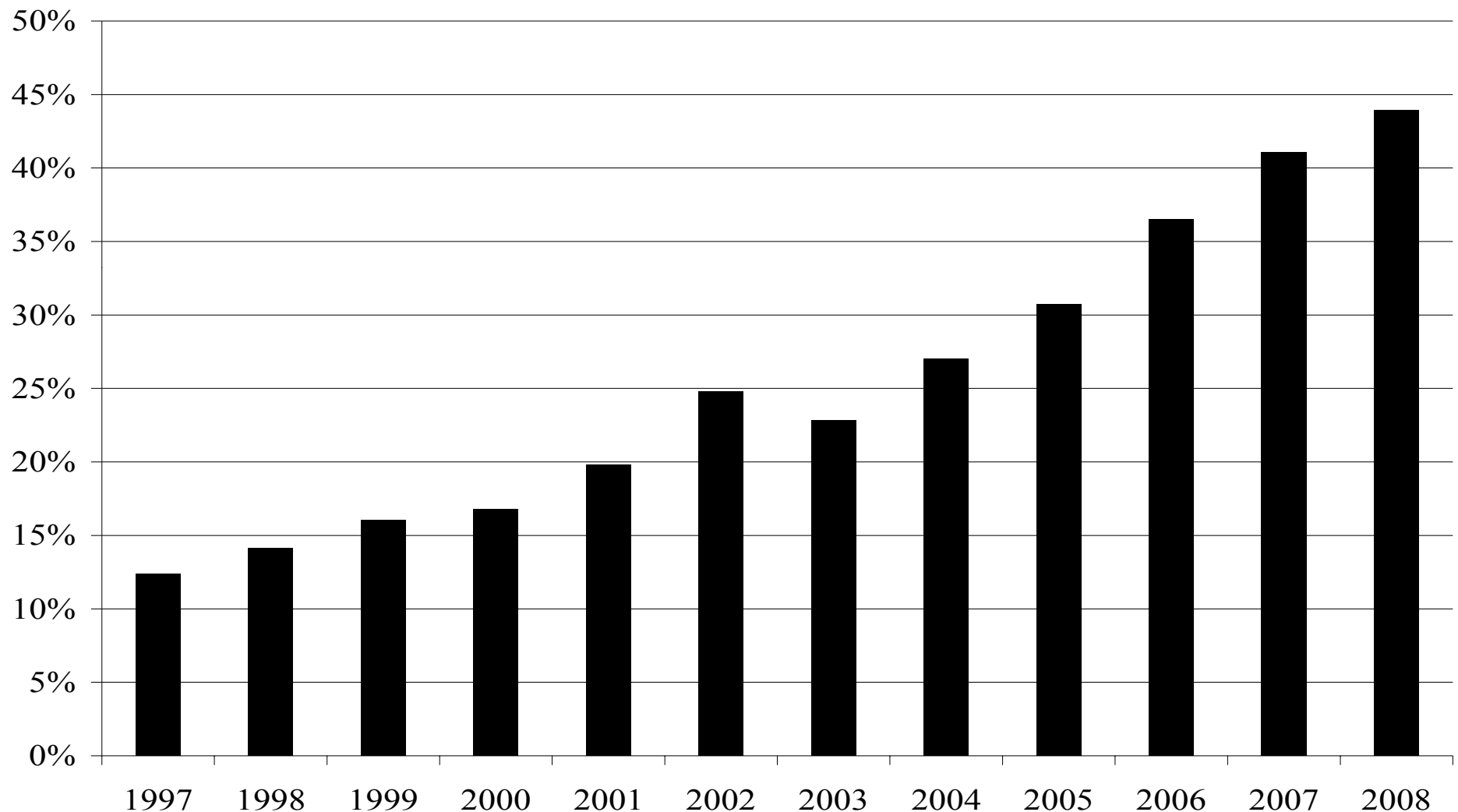
Source: IEA and own calculations

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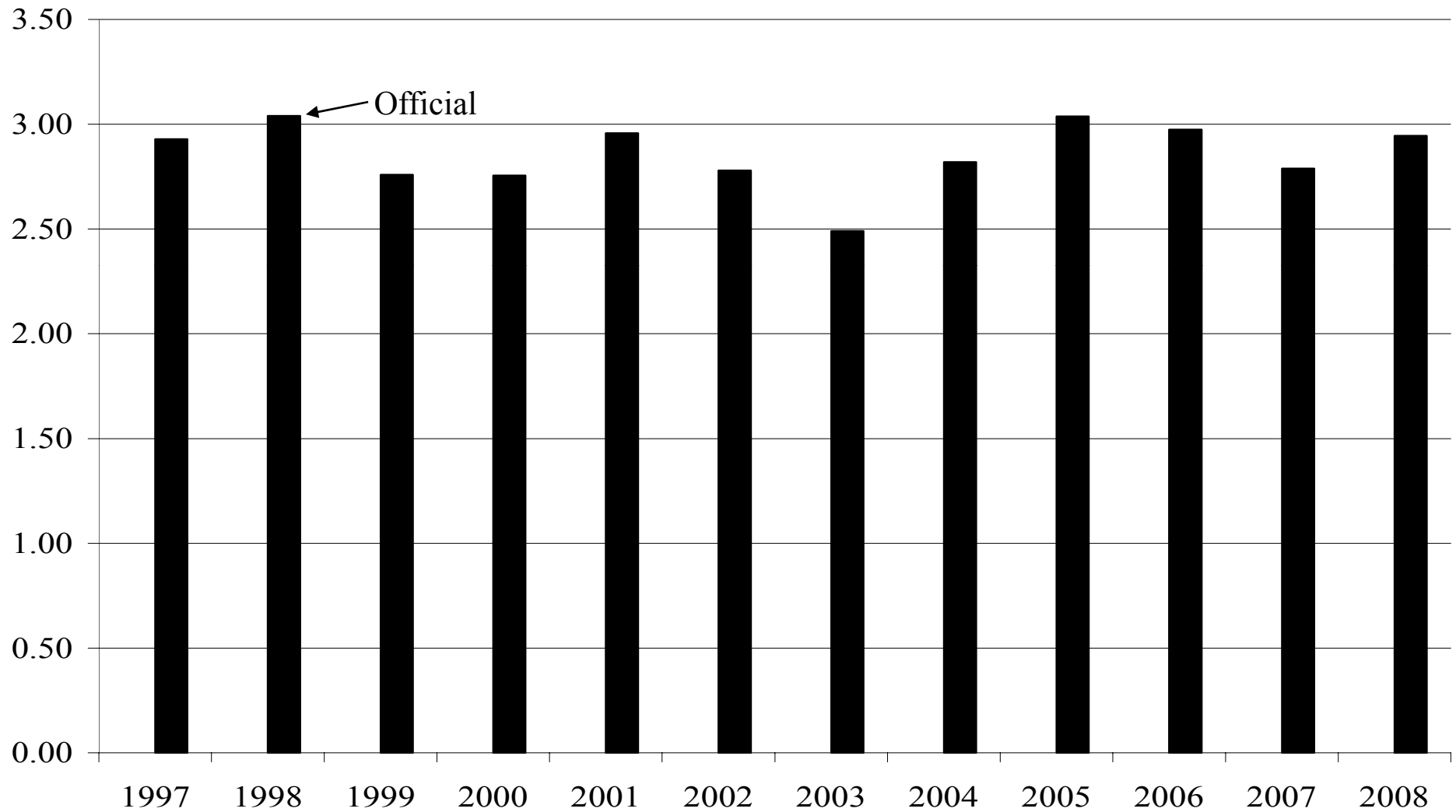
Consequence of growing domestic consumption and falling production, the share of PDVSA production to supply the domestic market increases from 12% up to 44% between 1997 and 2008.



Petroleum Exports

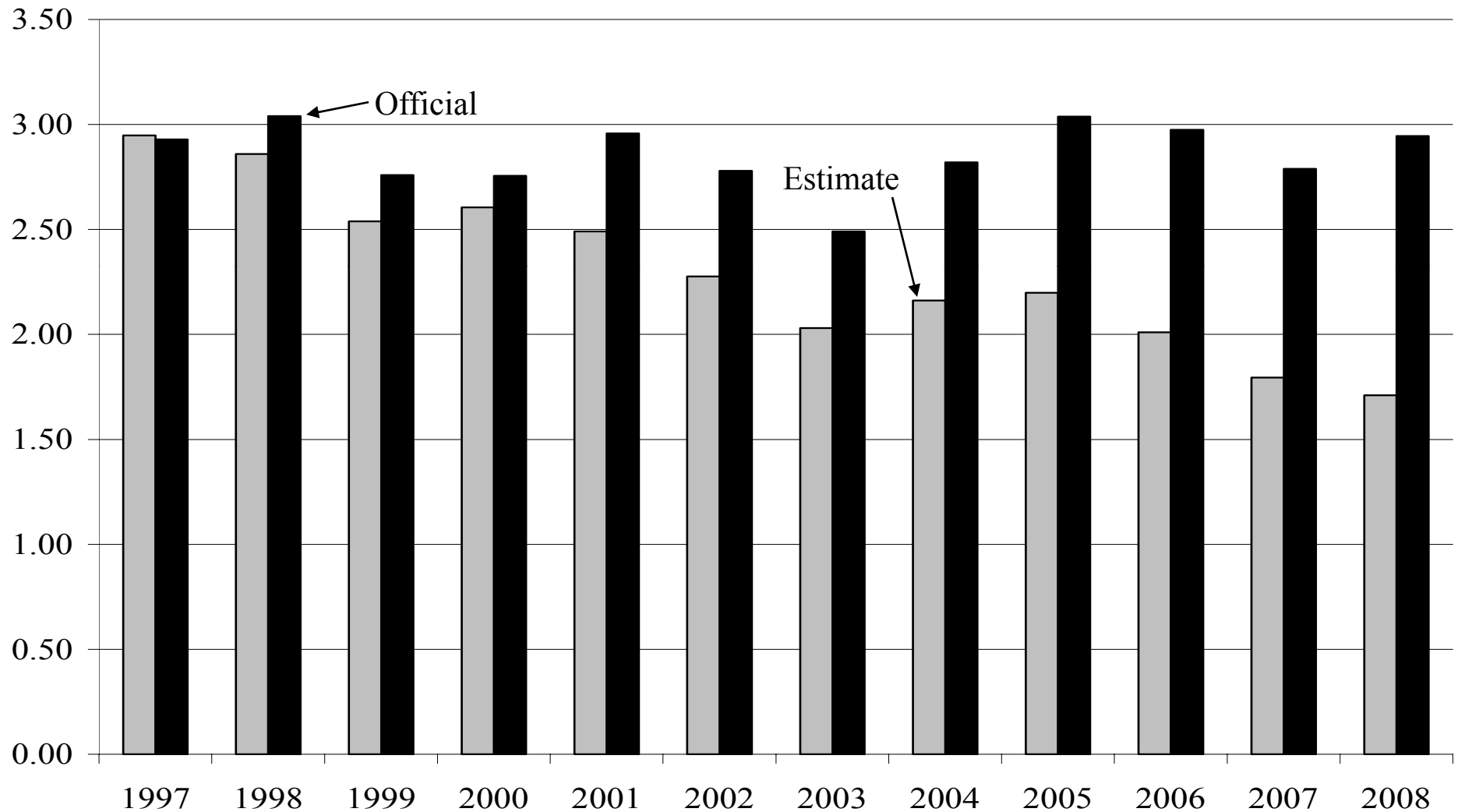
1997 - 2008

According to official figures petroleum exports were in 2008 similar to those of 1997



Source: MEM / PDVSA. 2008 is the average up to September.

According to official figures petroleum exports were in 2008 similar to those of 1997, estimated exports, on the basis of IEA production and calculated domestic fuel consumption, declined by 40% between 1997 and 2008.



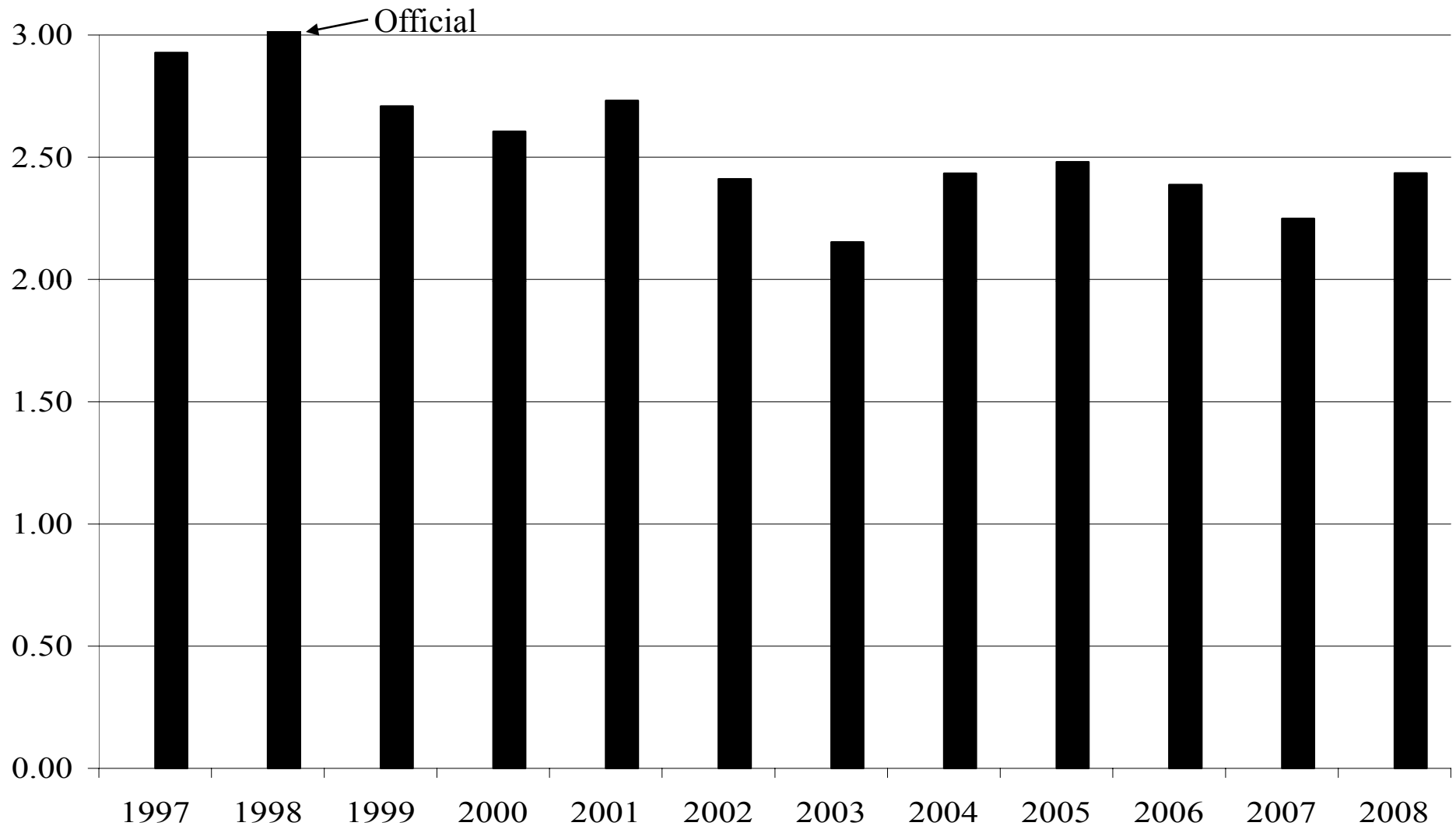
Source: MEM / PDVSA – IEA and own calculations

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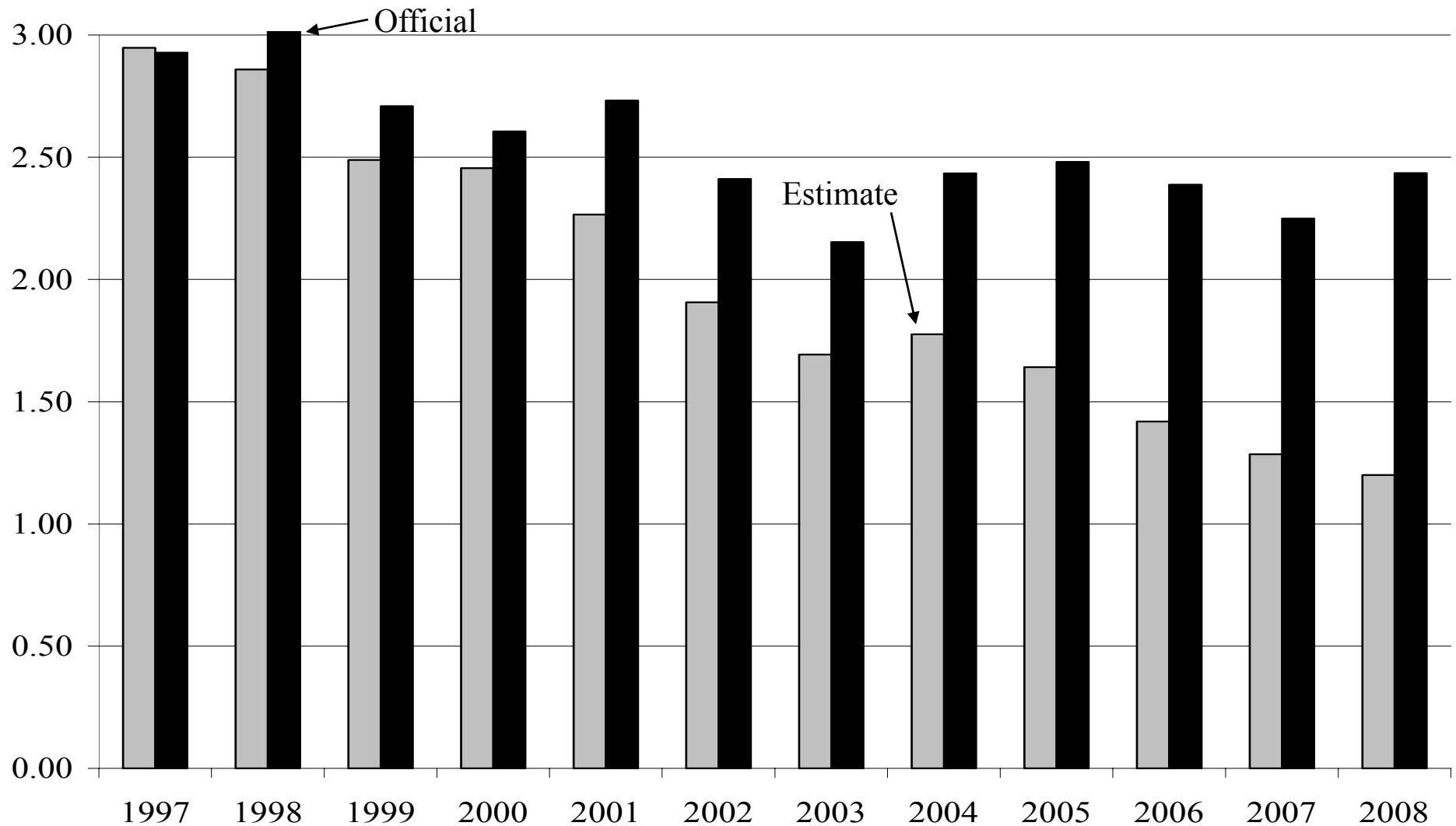
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Strategic Associations output per design is export bound thus domestic supply comes out of PDVSA own production. On the basis of official figures PDVSA exports declined by 17% between 1997 and 2008



Source: MEM / PDVSA. 2008 is the average up to September.

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Source: MEM / PDVSA – IEA and own calculations

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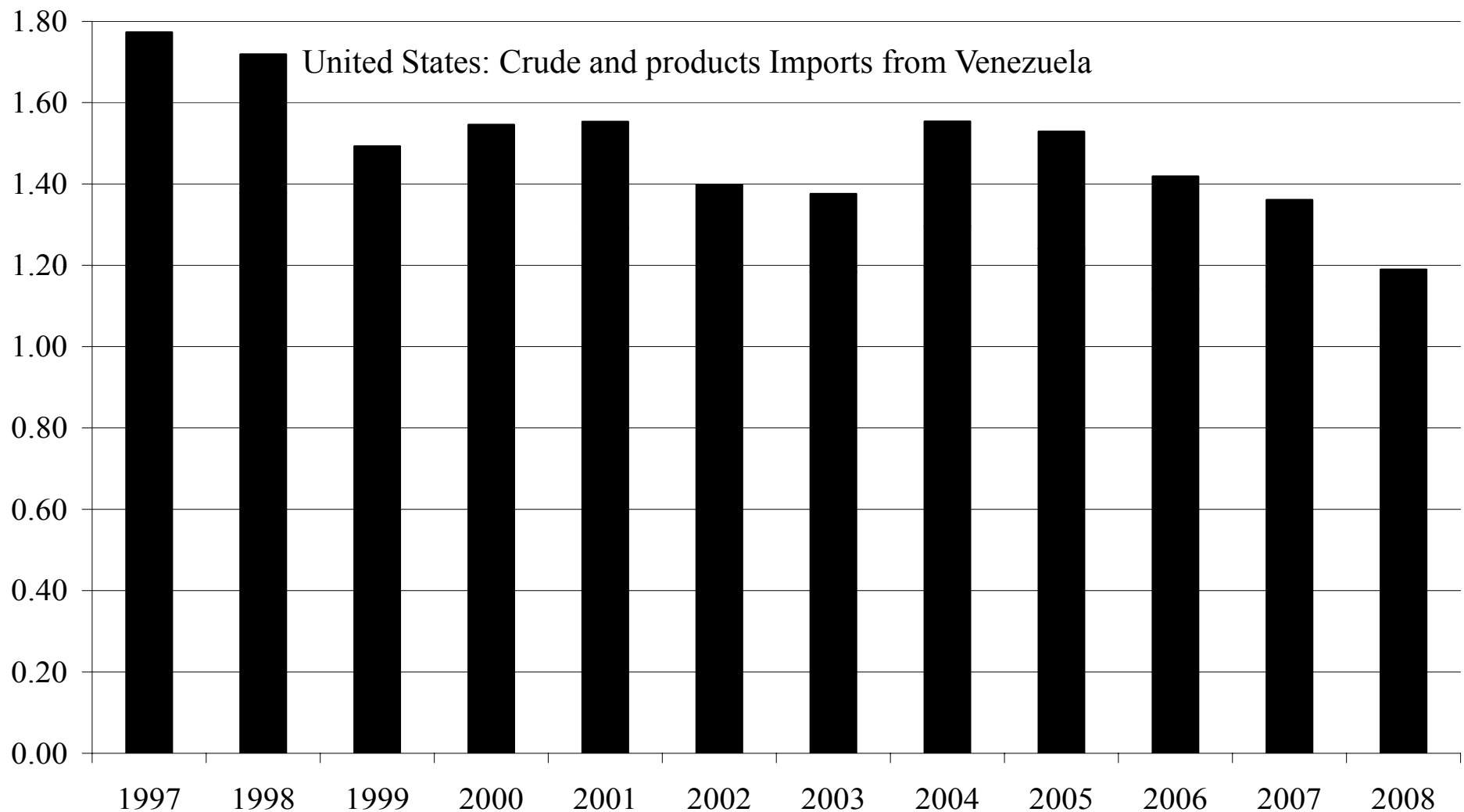
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Petroleum Exports by Markets

1997 - 2008

According to official EIA/DOE figures US petroleum imports from Venezuela declined by 1/6 between 1997 and 2008



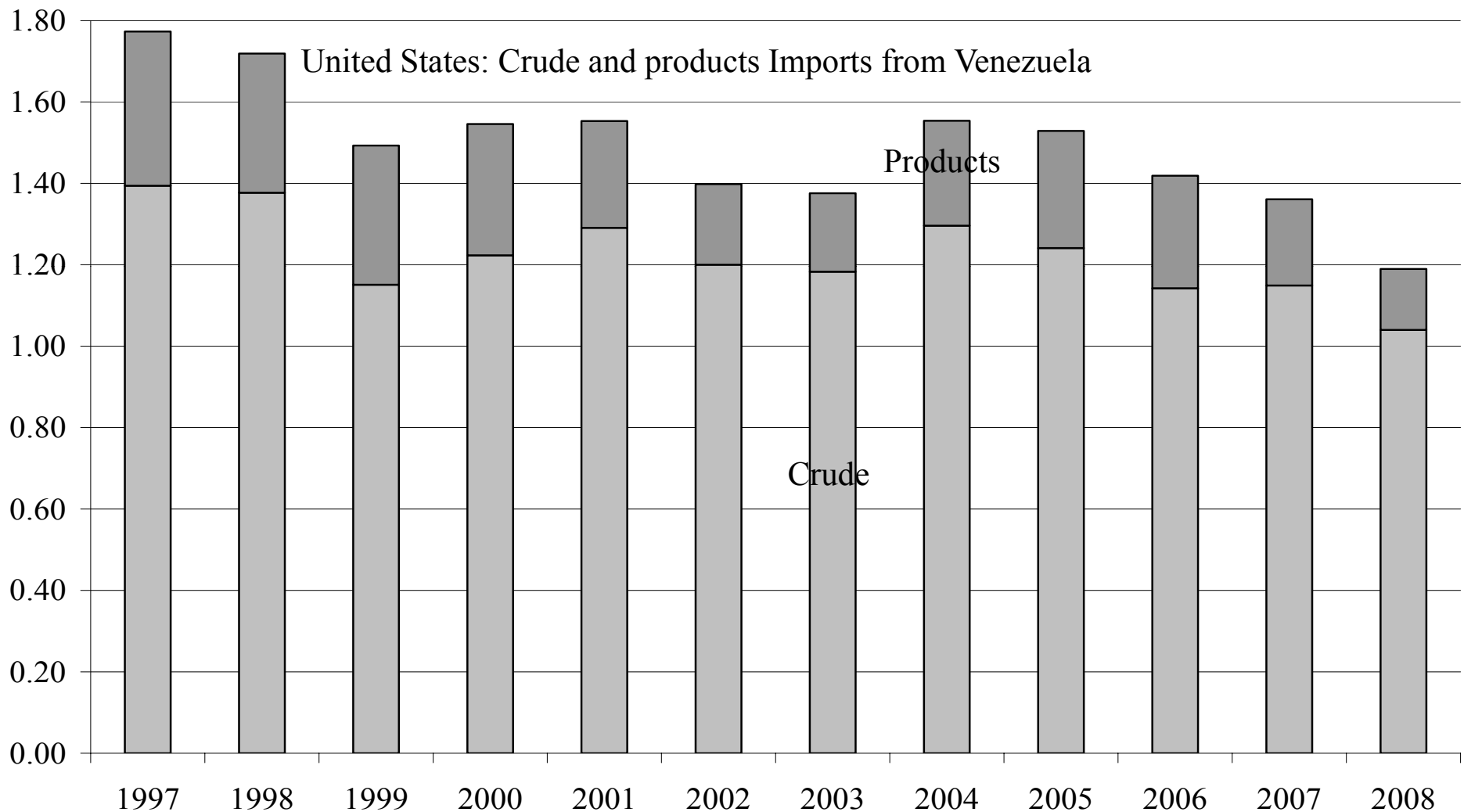
Source: EIA / DOE

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According to official EIA/DOE figures US petroleum imports from Venezuela declined by 1/6 between 1997 and 2008, products imports declined by almost 2/3.



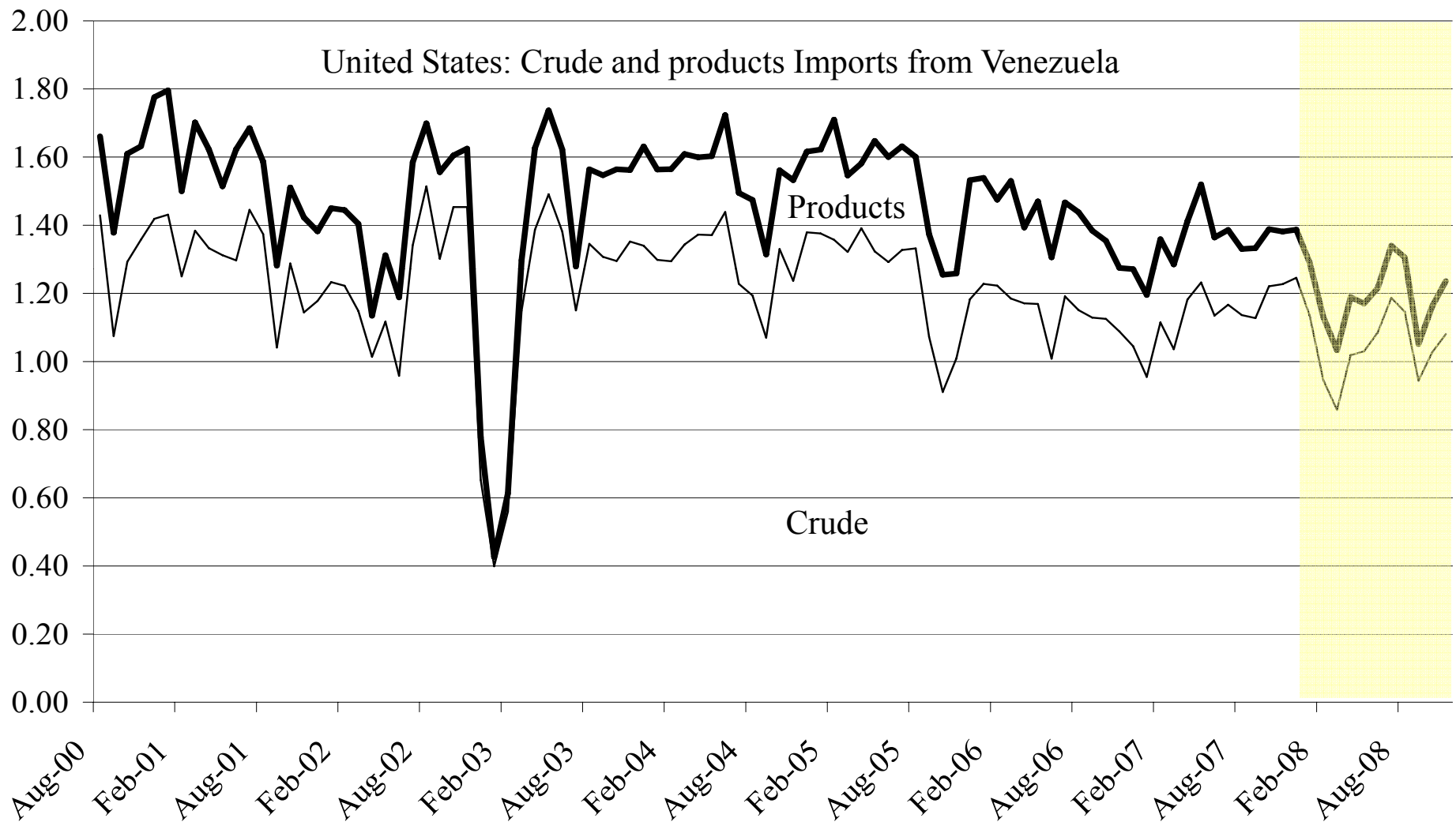
Source: EIA / DOE

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The drop in US crude and products imports from Venezuela accelerated all along 2008.



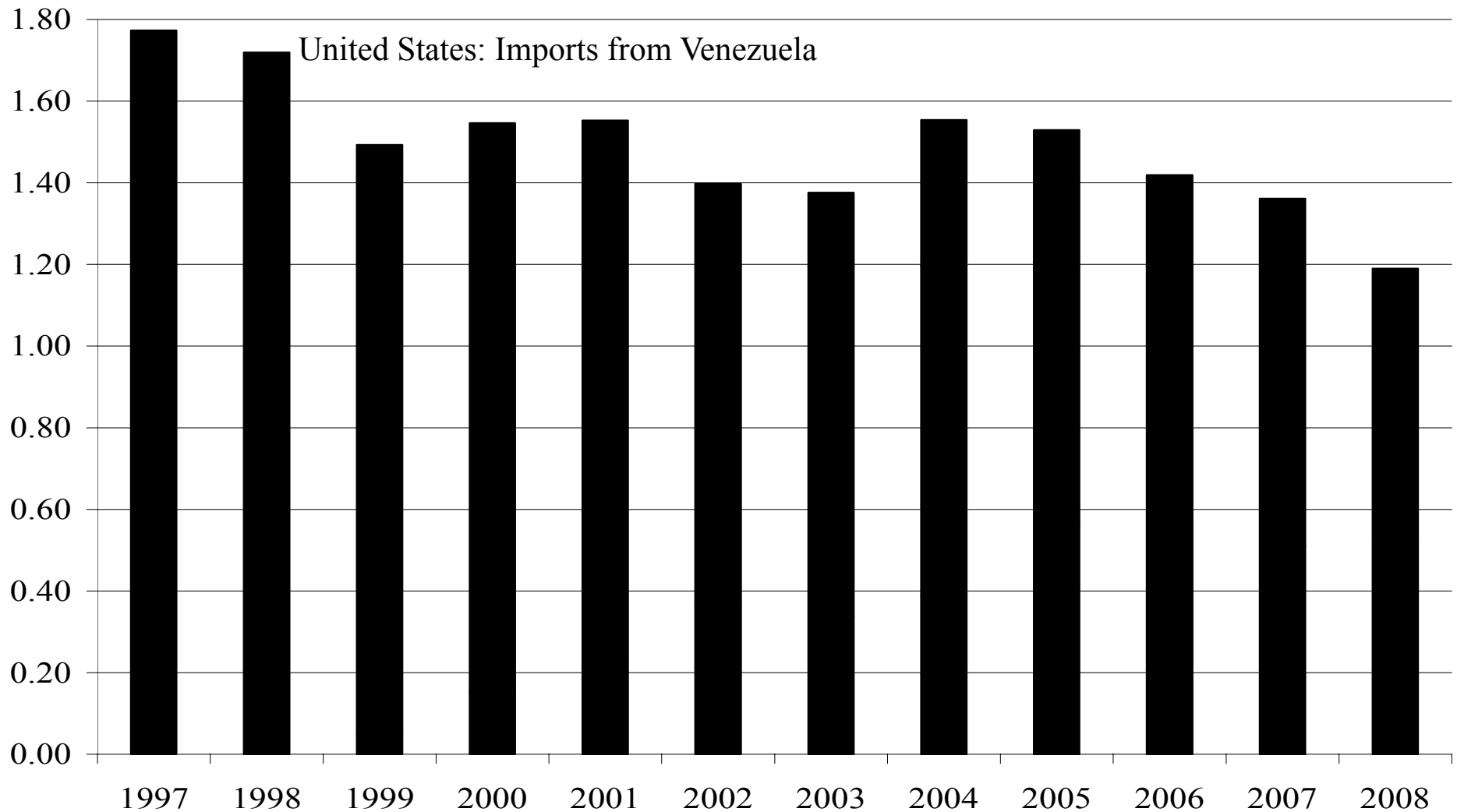
Source: EIA / DOE

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It is possible to break down US imports between those of the Strategic Associations designed to supply this market and exports by PDVSA to supply its own network and clients.



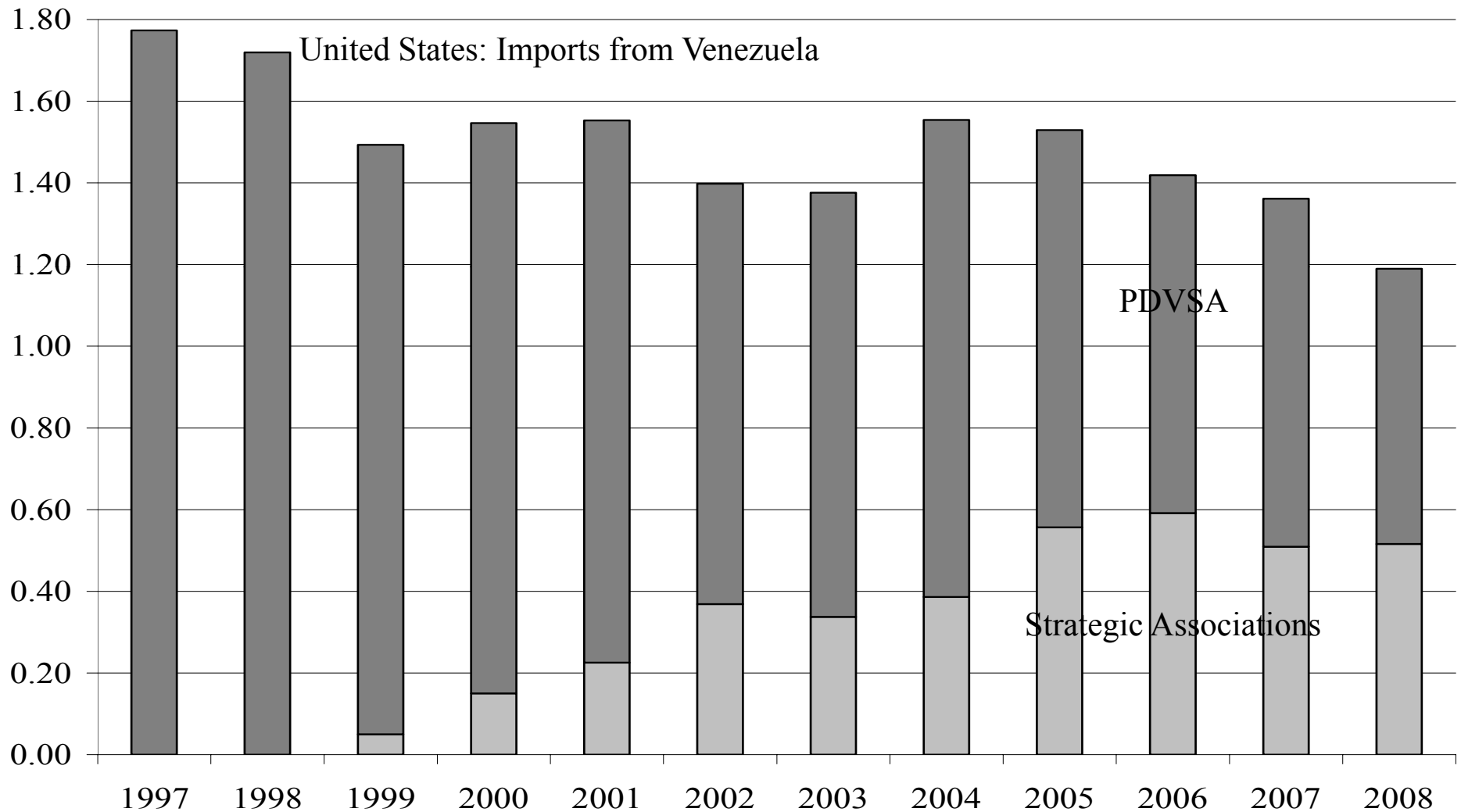
Source: IEA y EIA / DOE

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The drop in US imports from Venezuela has been at the expense of PDVSA own exports. US imports out of PDVSA own production have declined by almost 2/3.



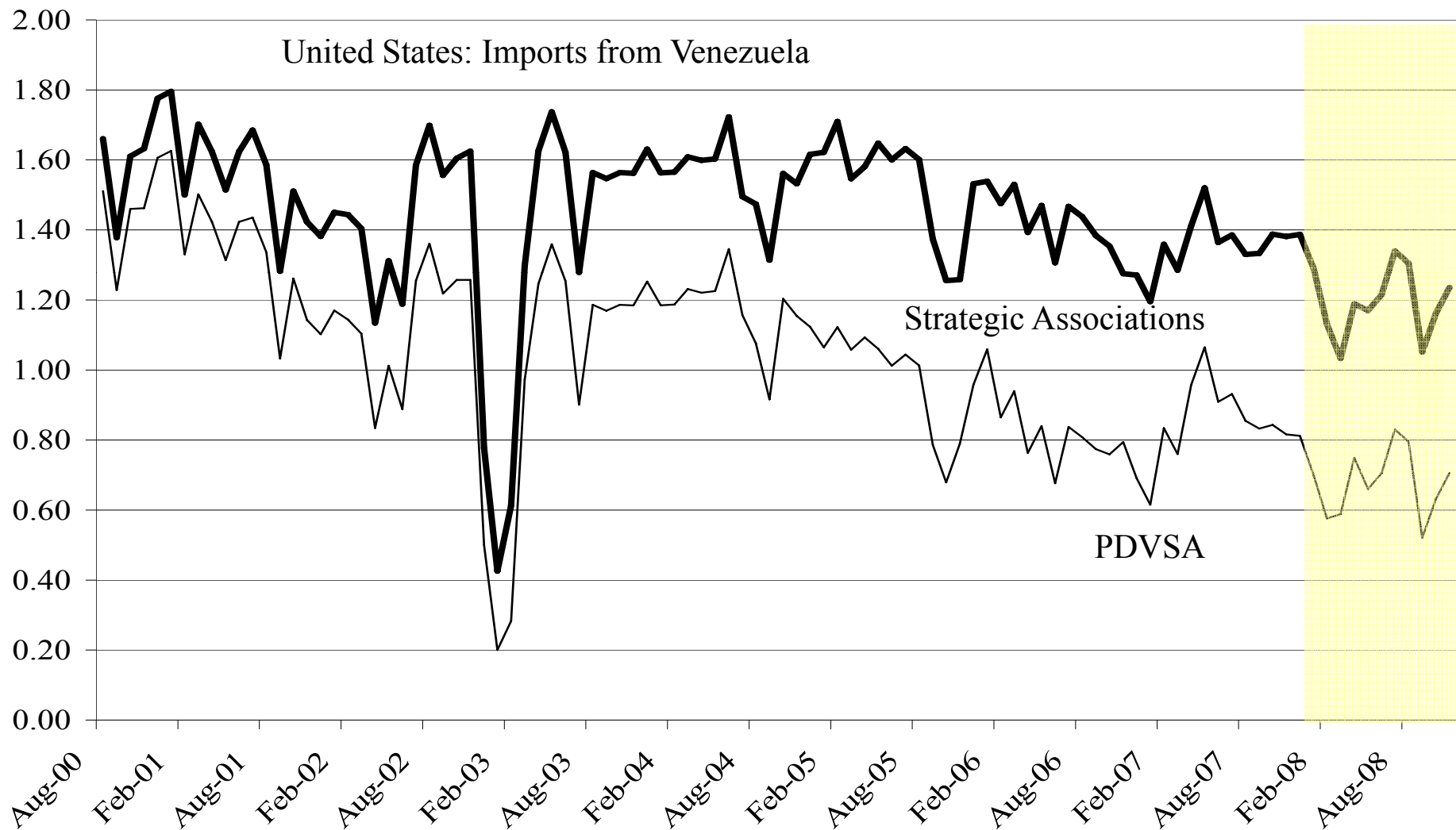
Source: IEA y EIA / DOE

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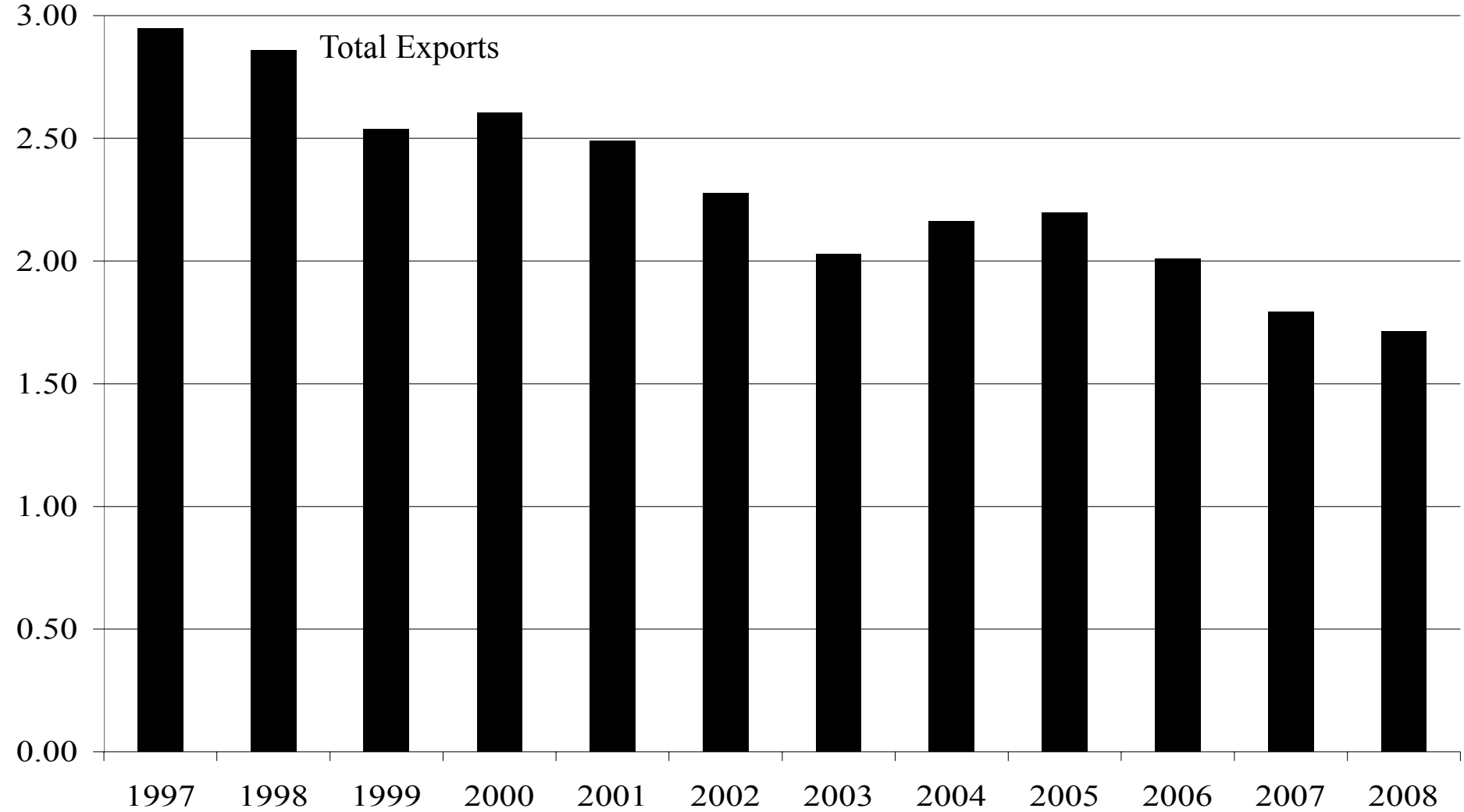
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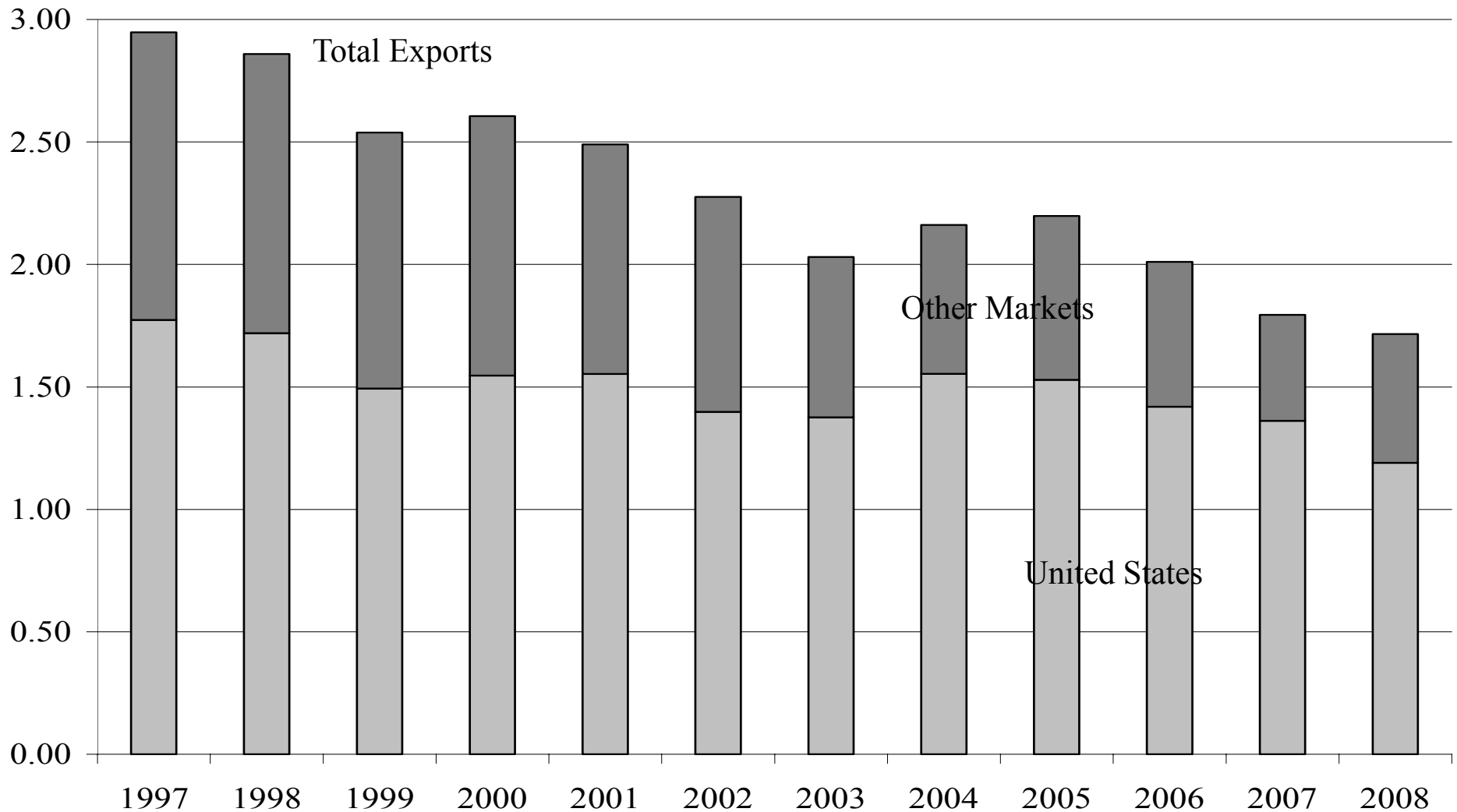
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It is possible to break down total estimated exports between exports to the US and to other markets.



Source: AIE, EIA / DOE and own calculations
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It is possible to break down total estimated exports between exports to the US and to other markets. Exports to other markets have fallen faster than total exports.



Source: AIE, EIA / DOE and own calculations

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Exports to markets other than the US dropped by 2/3 between 1997 and 2008. Roughly 0.4 Mbd are sold to different LAC countries under different government to government agreements and the rest to China.



Source: AIE, EIA / DOE and own calculations

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The Rise and Fall of PDVSA

1975 - 2008

The keys to PDVSA's success: **Arm's length relationship**

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- Seamless nationalization process securing operational continuity
- No interference with personnel management and operational decision making.
- Operational and personnel management systems as well as those of checks and balances inherited from the IOC.
- Run as a private company: relationship through shareholder meetings and ruled by the Code of Commerce, securing transparency.
- Clear cut and transparent revenue distribution rules.

The keys to PDVSA's success: **Long term planning and strategic vision**

- Consolidation: mid 70s to late 80s.
 - Production capacity at 2.5 Mbd
 - Domestic refining upgraded capacity at 1.4 Mbd
- Internationalization: mid 80s to early 90s.
 - International refining capacity 1.4 Mbd
- Expansion: early to late 90s.
 - Opening Strategy
 - Production at 3.5 Mbd
- Restructuring: late 90s.
 - Three vertically integrated companies into an single Corporation

The reasons for demise of PDVSA: **Government control**

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- Use of PDVSA resources for Government policies
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The outcome:

- Half the personnel
- 2/3 Managers and Professionals
- 282.000 years of accumulated experience

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► The consequence is that described above