



The American Antitrust Institute

**CARTELS PORTRAYED:
A 21-Year Perspective,
1990 to 2010**

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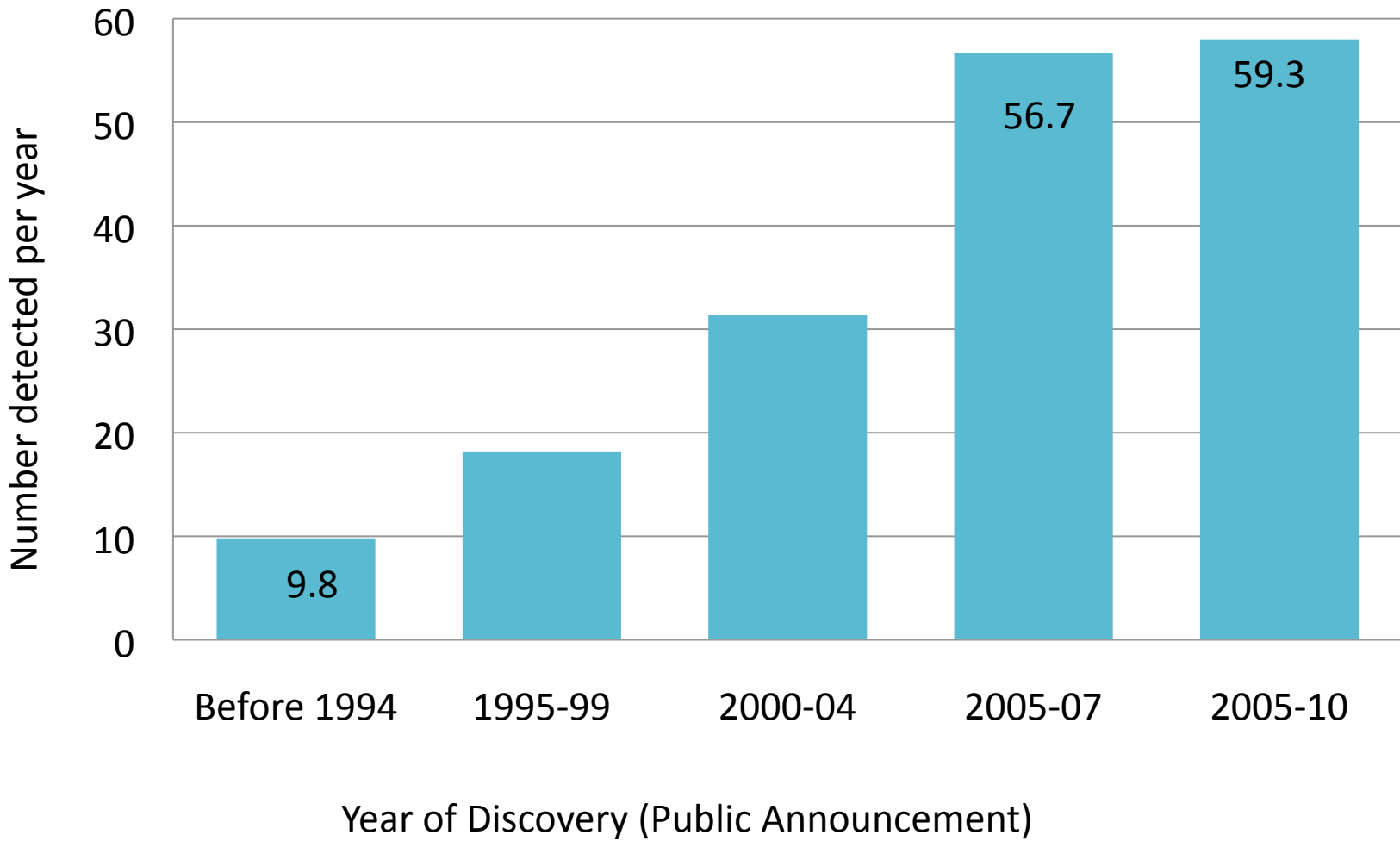
Introduction

- OBJECTIVE: to illustrate the global size, economic impacts, and enforcement responses to the modern international cartel movement.
- SAMPLE: 640 private hard-core cartels sanctioned between January 1990 and December 2010. Each cartel had participants with headquarters in two or more nations.
- Monetary data are expressed in nominal U.S. dollars.
- A special effort is made to illustrate **trends**.

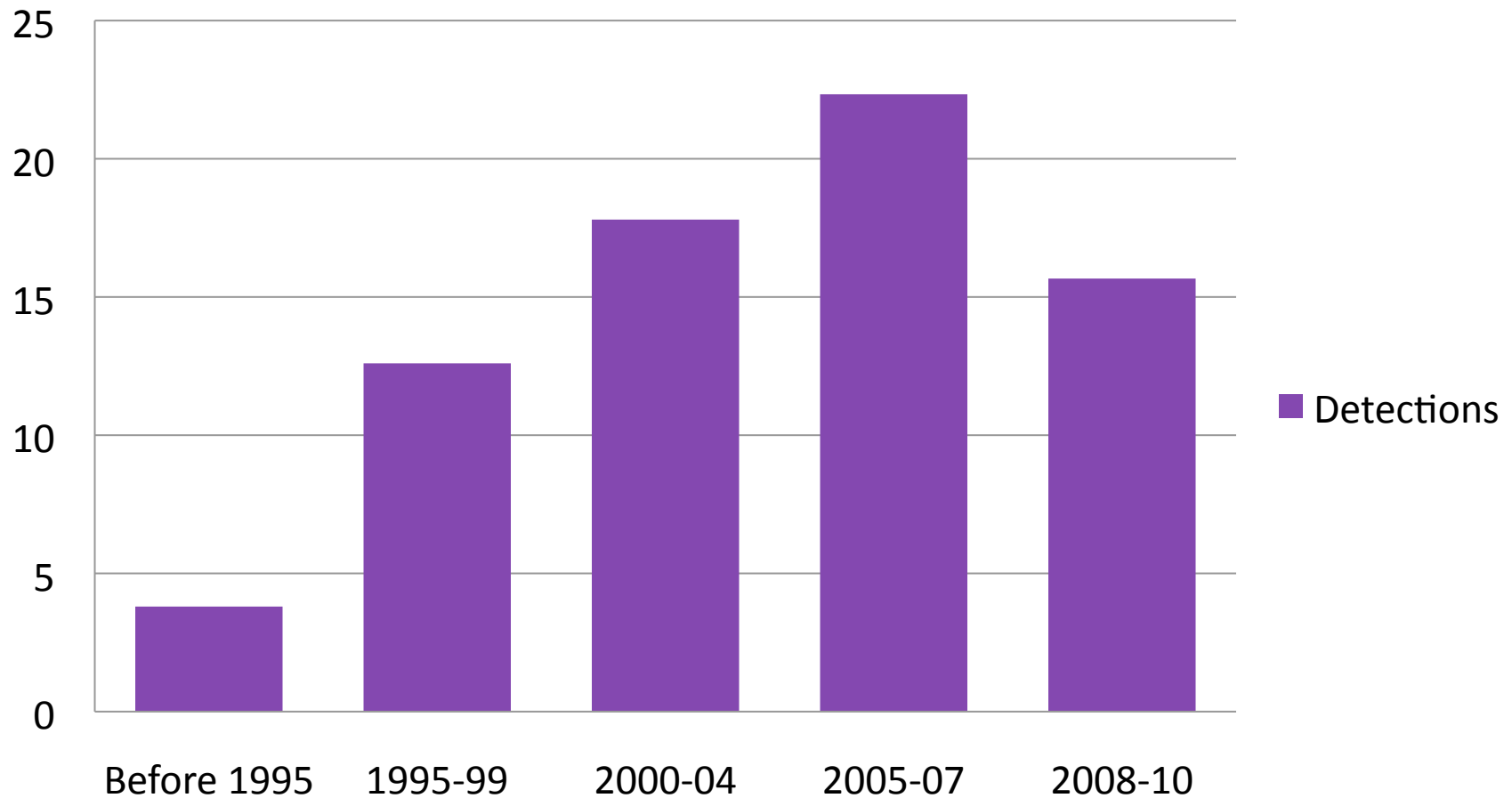
Narrative on Detection

- Indictments in the US, Canada, and EC seem to have peaked during 1995-2007, but are rising elsewhere.
- The EU's National Competition Authorities (NCAs) are now the biggest prosecutors, accounting for ½ of the total.
- Asia (mostly Korea) is becoming a cartel tiger.
- Of late, So. Africa and Brazil are active also.
- Although increased detection rates are probably due to more agencies and better policies, the total number of cartels (including hidden ones) could be rising or falling

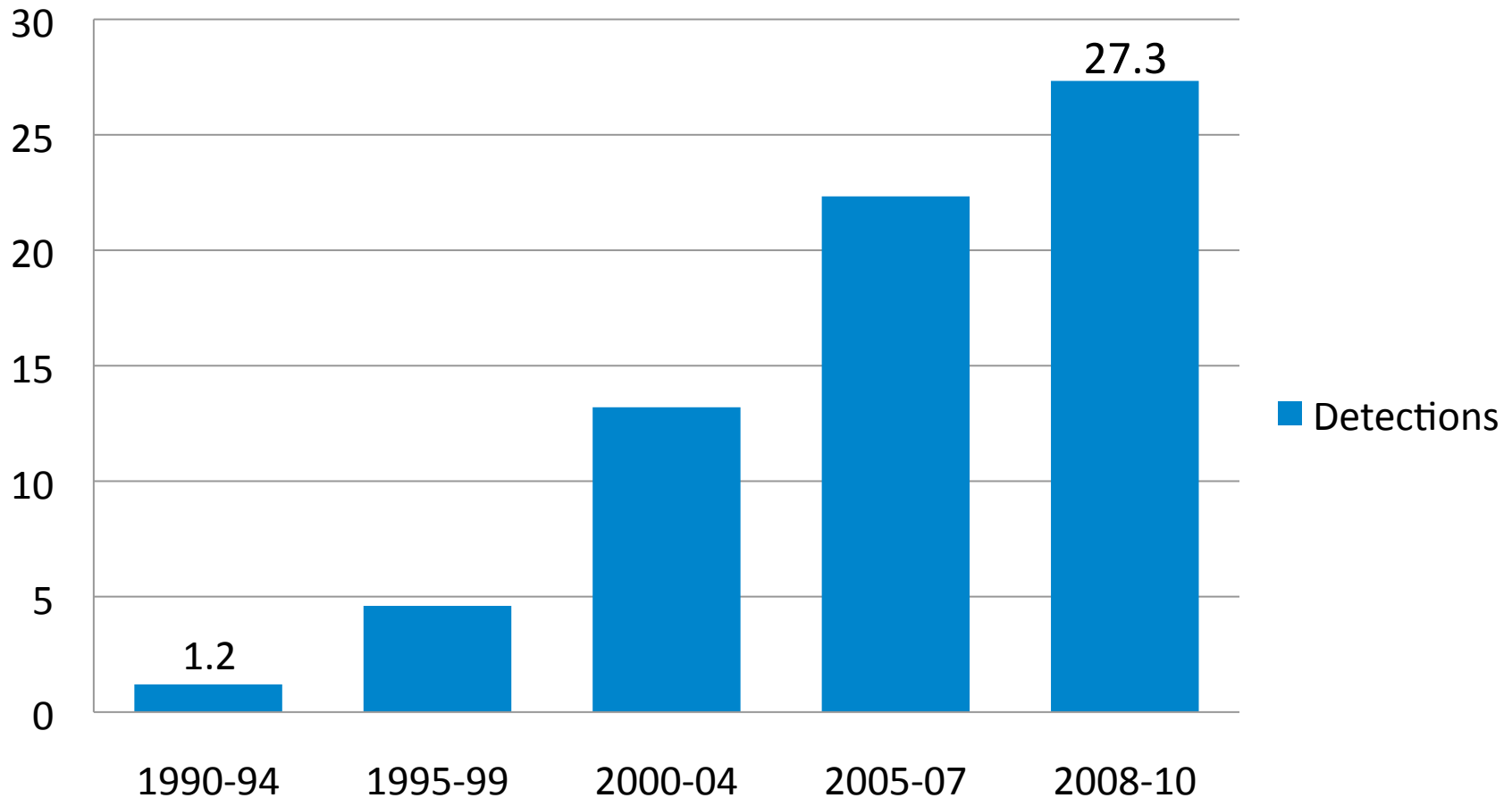
Rates of Discovery of All Cartels Are Rising over Time



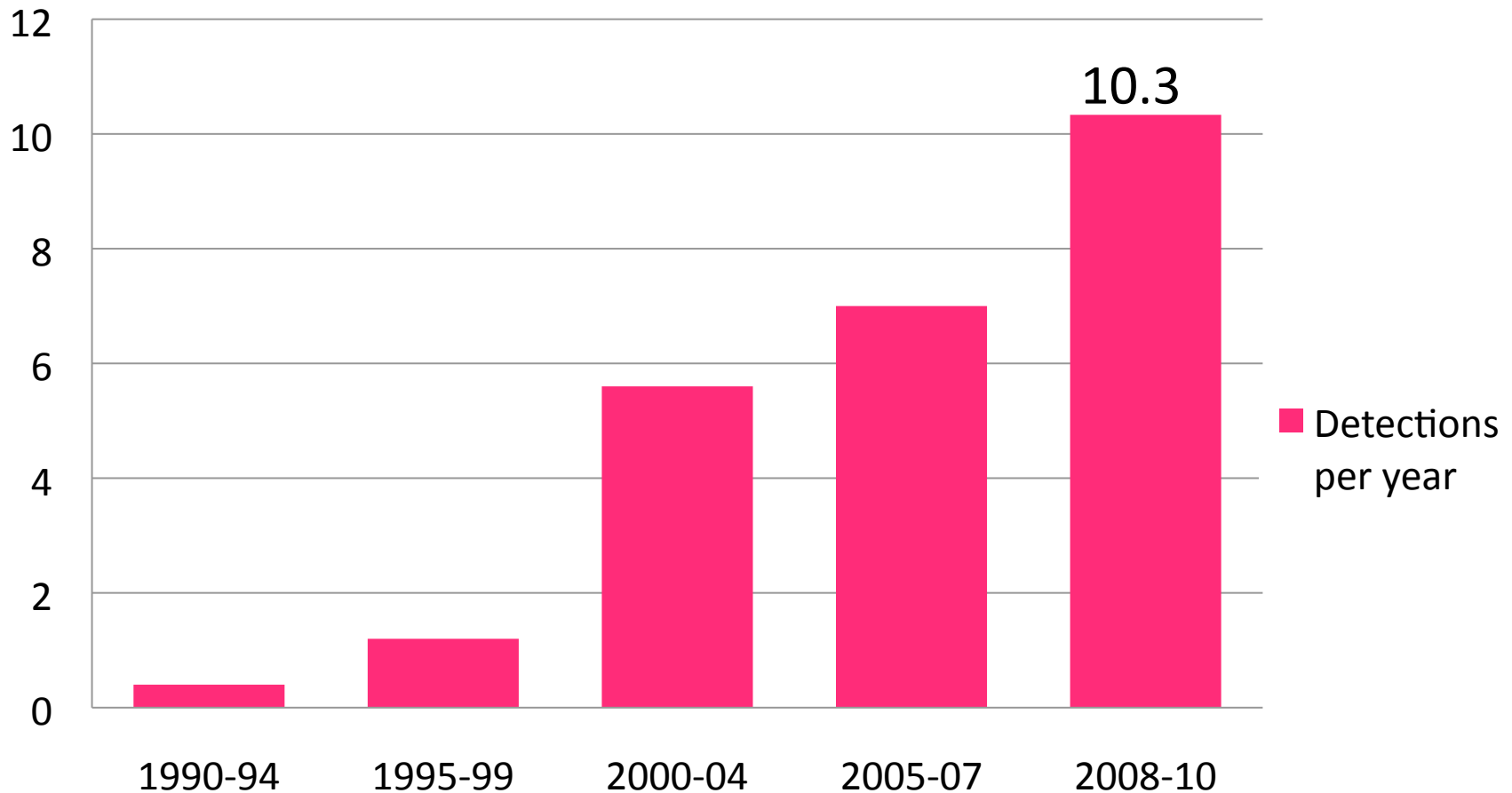
Annual Cartel Detections by the **US & EC** Peaked in 2005-07



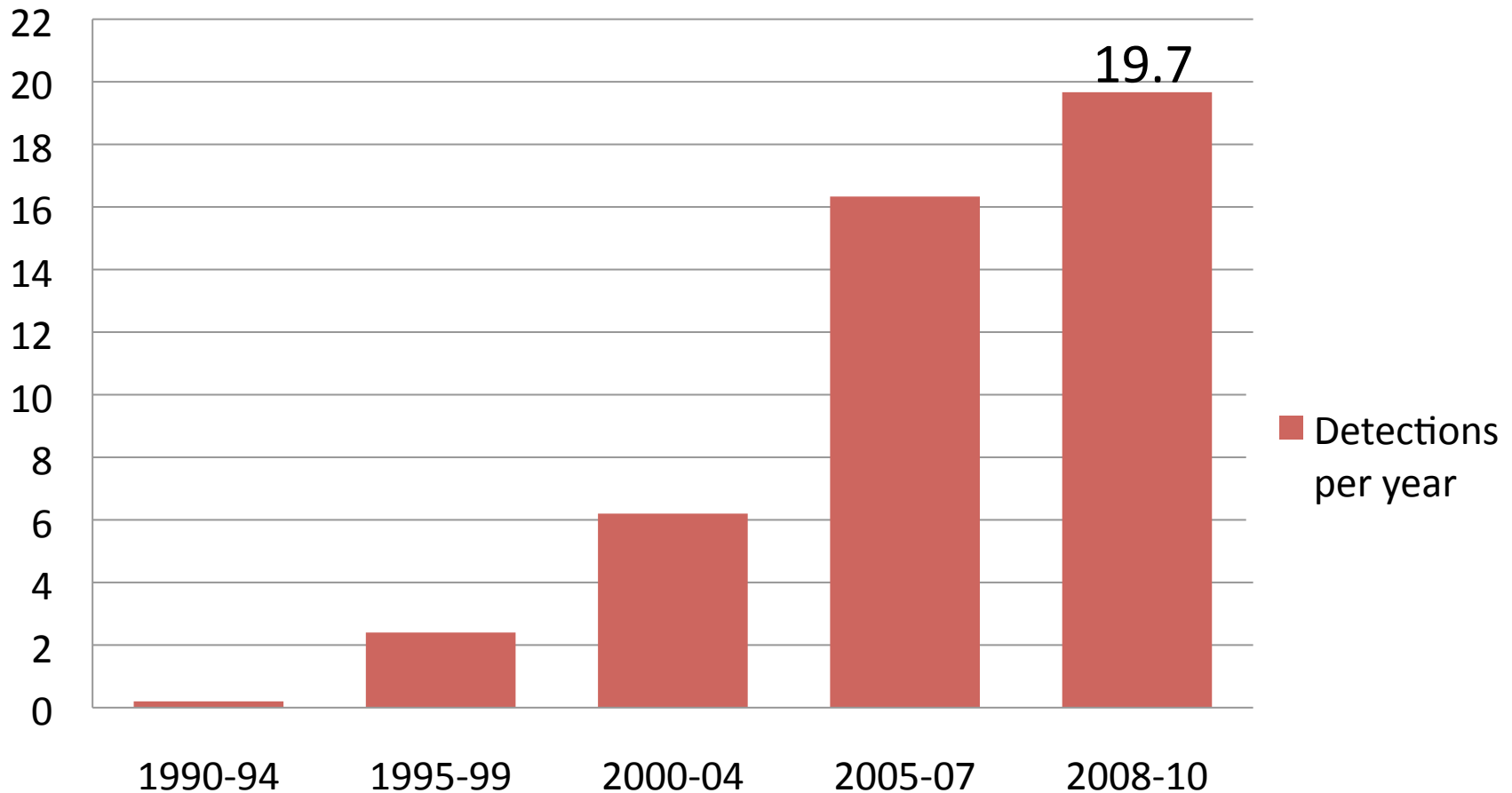
Detection Rates by the EU's NCAs Surpass All Others since 2000



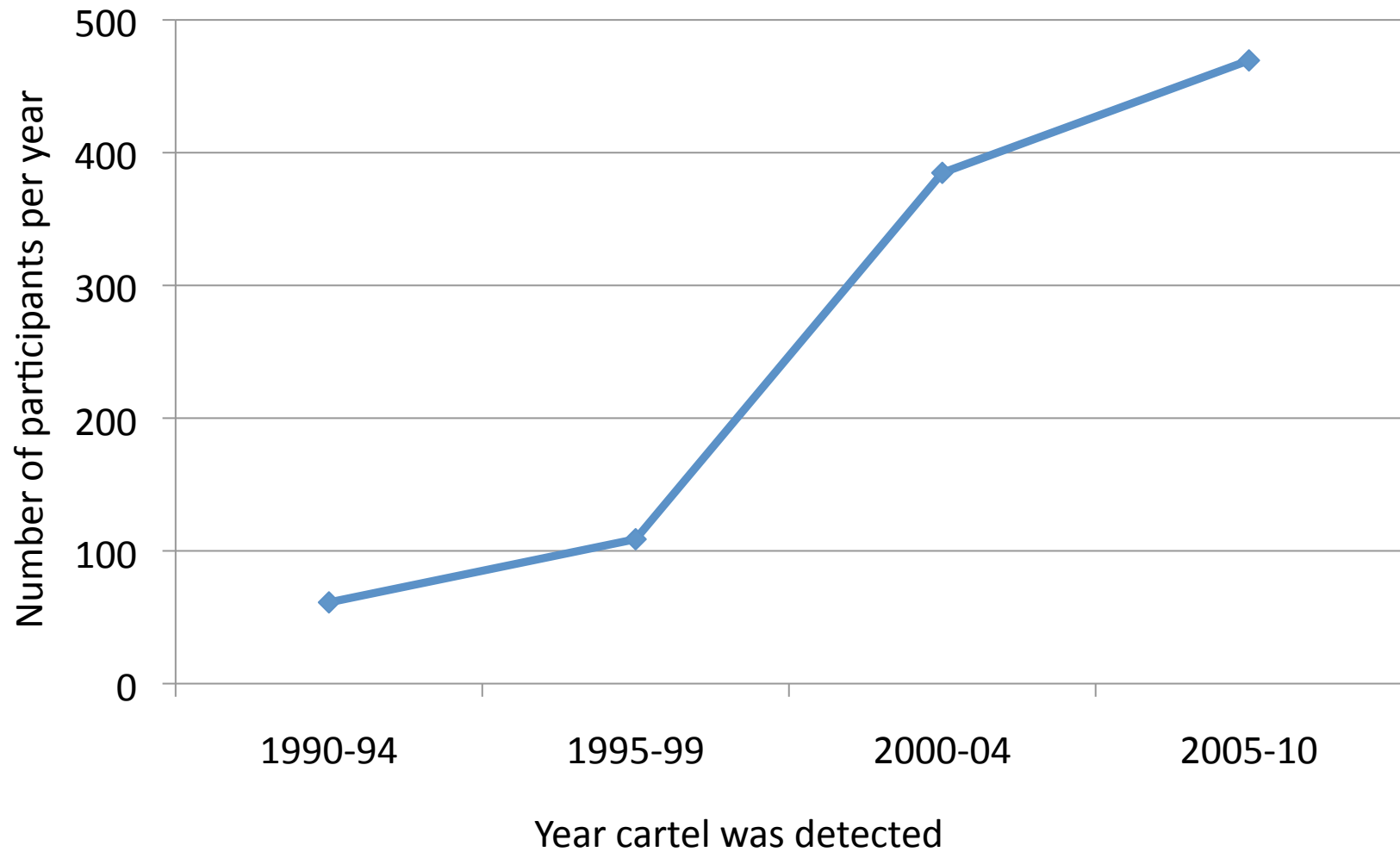
Asian Anti-Cartel Enforcement (Especially Korea) Is Accelerating



Cartel Detections in **Africa and Latin America** Are Now Above US Levels



Annual Number of Corporate Cartelists Detected Is Rising



PENALTIES OVERVIEW

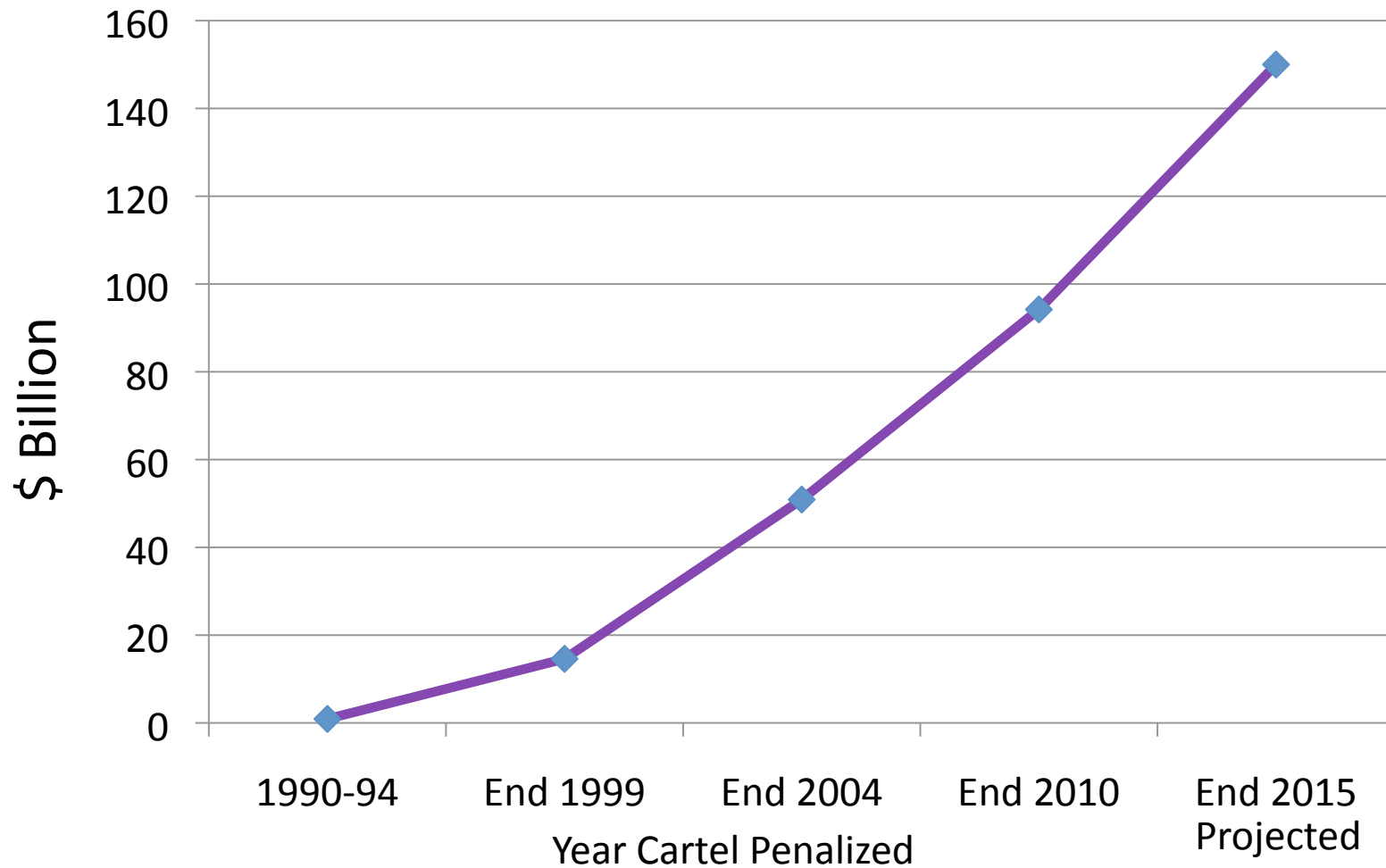
- Cartel fines and private settlements are about equal and exceed \$94 billion combined.
- The historical leader in fines – the DOJ – has been overtaken by other authorities.
- EC fines exceeded the DOJ's after 1999.
- Over 7000 companies investigated
- Over 1550 companies penalized
- Over 370 executives fined or imprisoned

Penalties on International Cartels

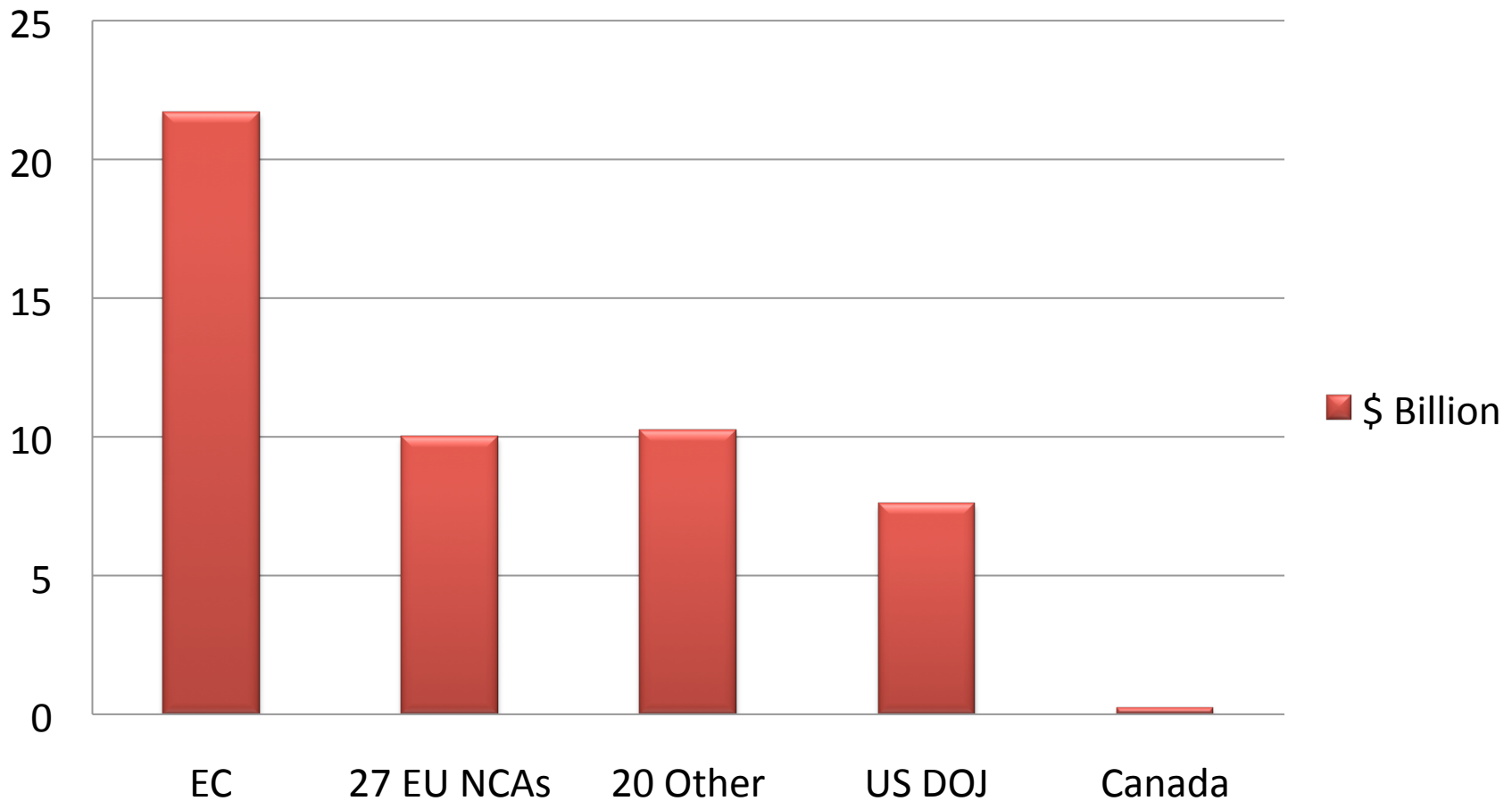
Total \$94 Billion (1990-2010)



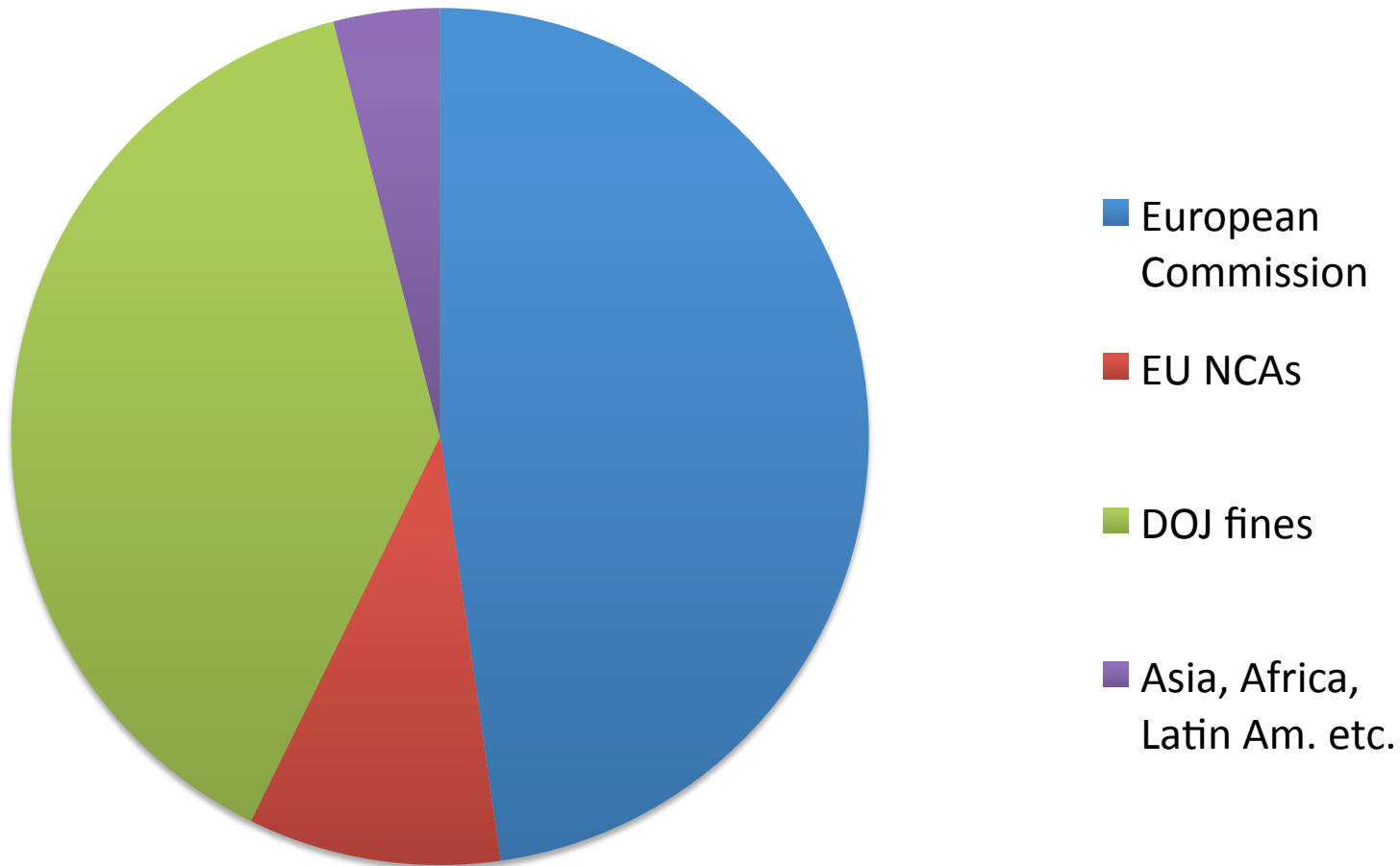
Cumulative Penalties Since 1990, by Year Penalized



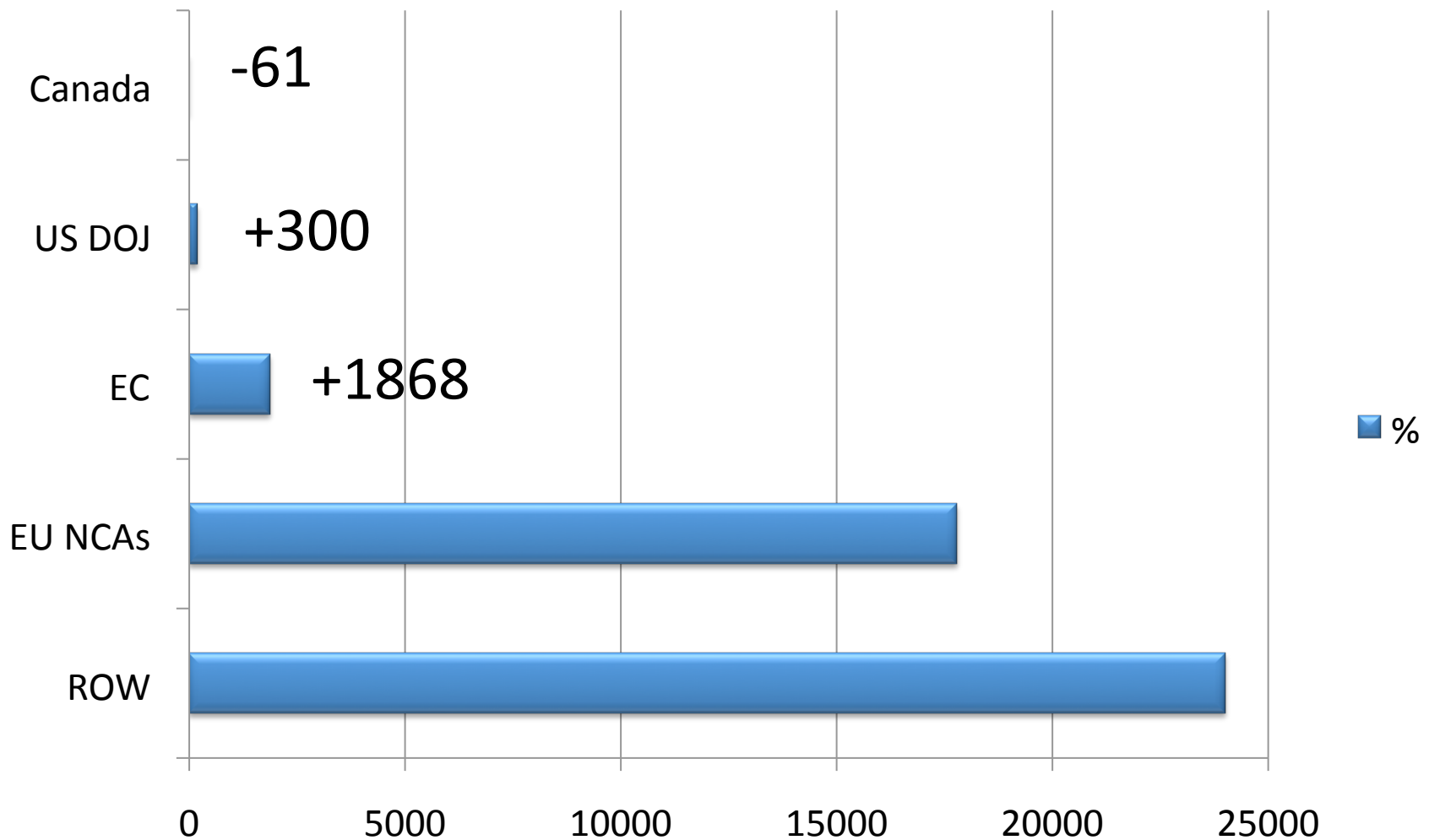
Government Fines Imposed on International Cartels Total \$ 50 Billion



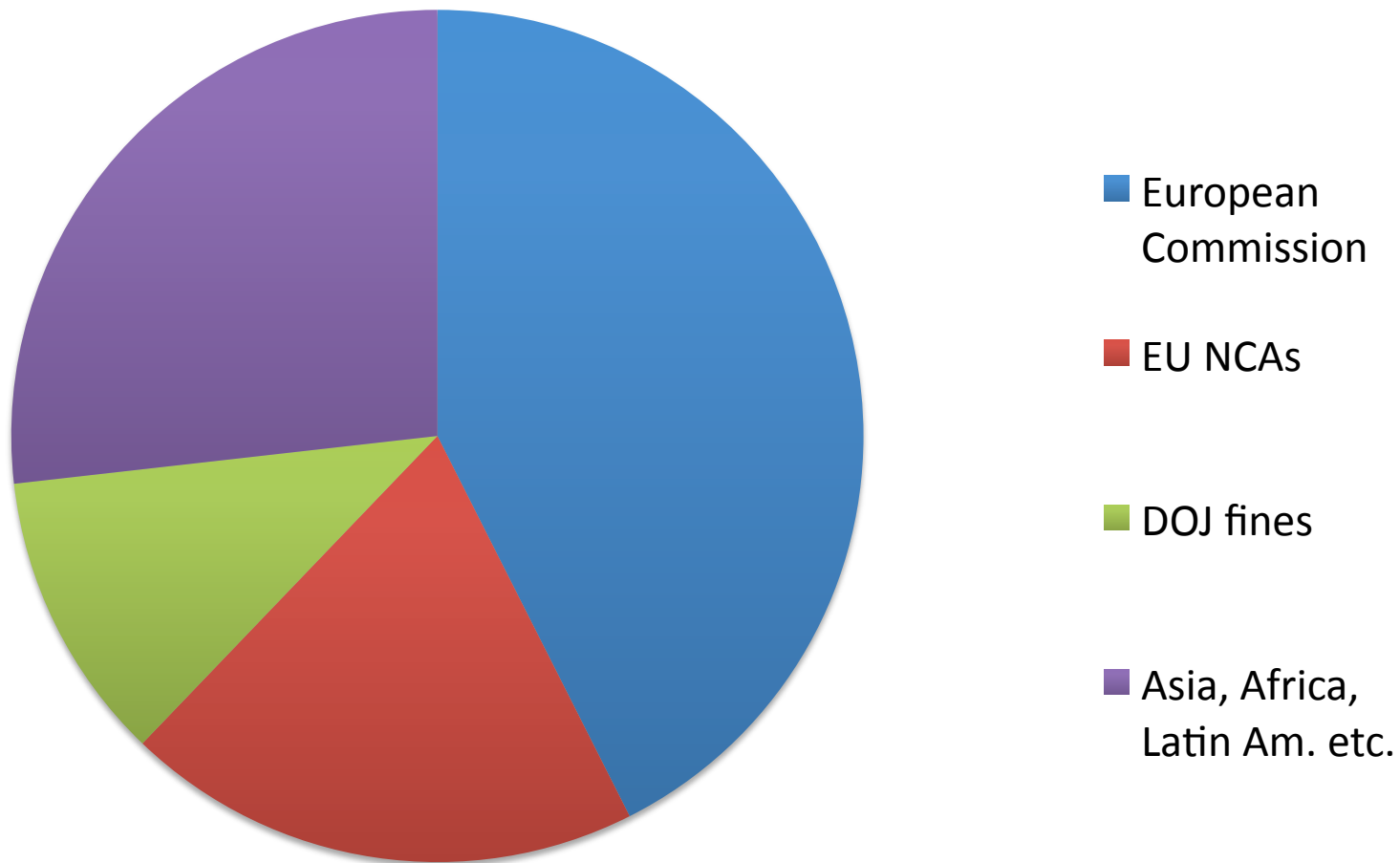
1990-1999: 96% of Fines Were Imposed by **EU** and **USA**



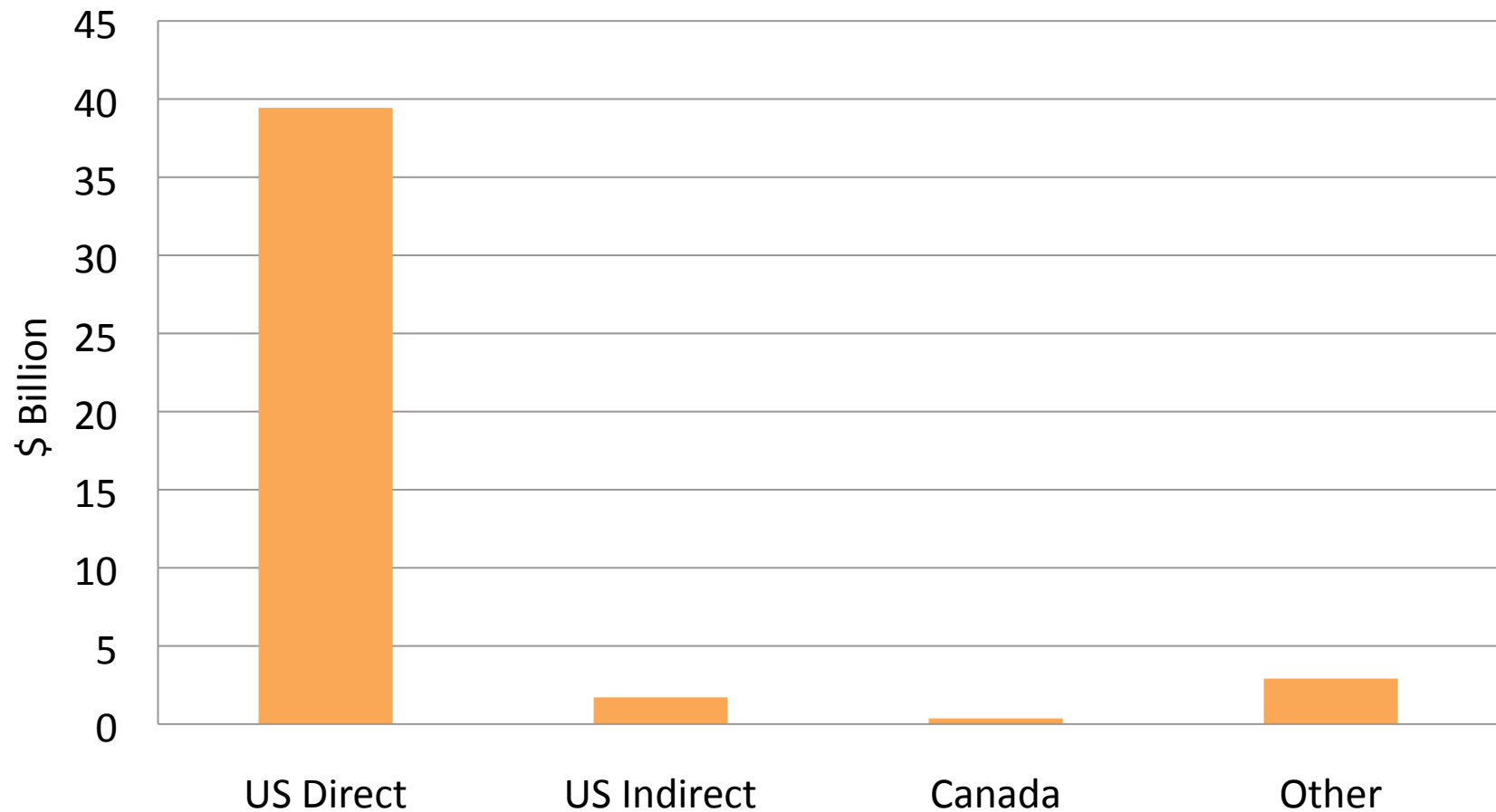
Growth in Fines: 2000-10 vs. 1990-99



2000-10: **Other Authorities'** and **EU's** Share of Fines Grows, DOJ's Shrinks



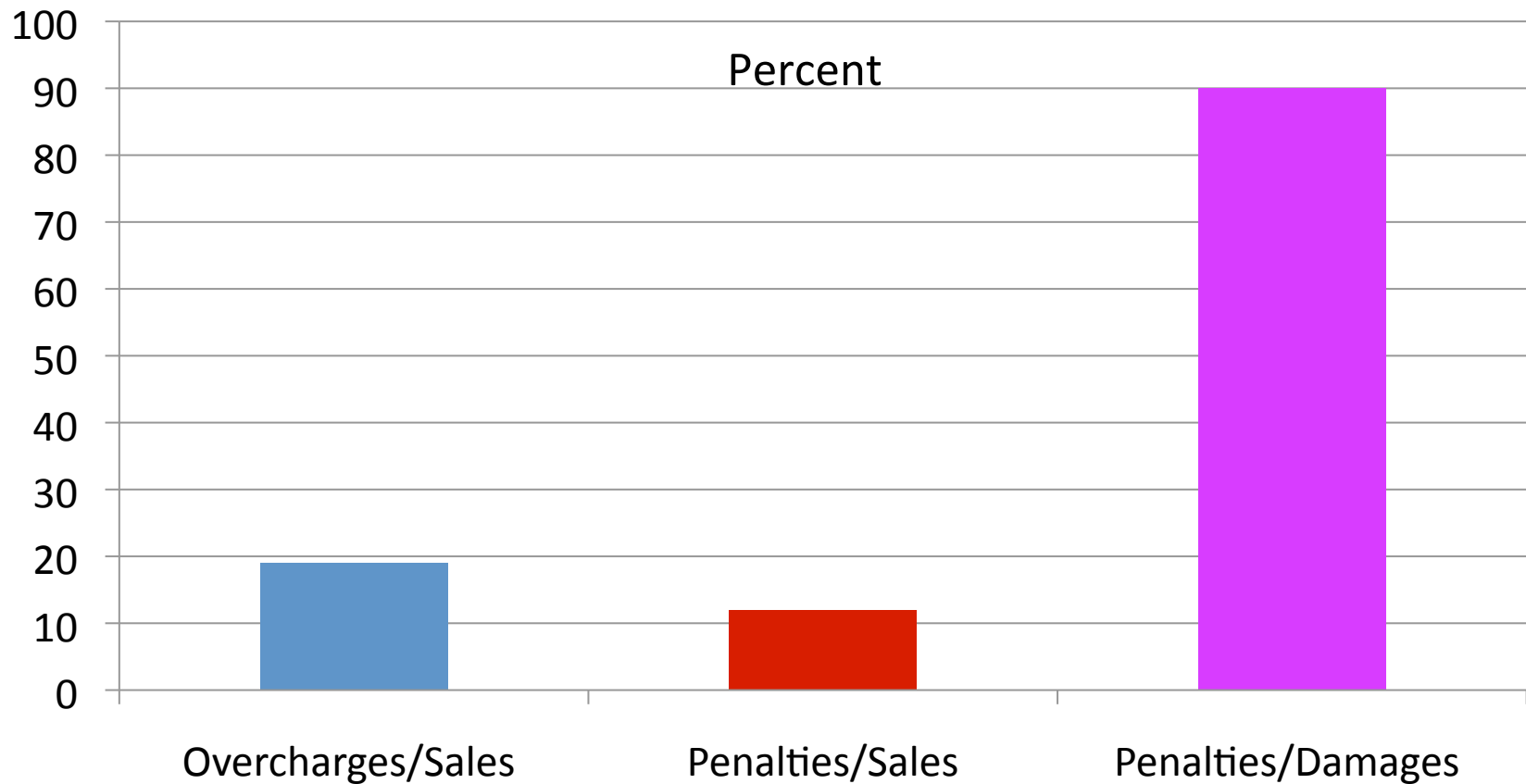
Private Settlements Total \$44.2 Billion, Most with Direct Buyers in the US



DETERRENCE and PENALTIES

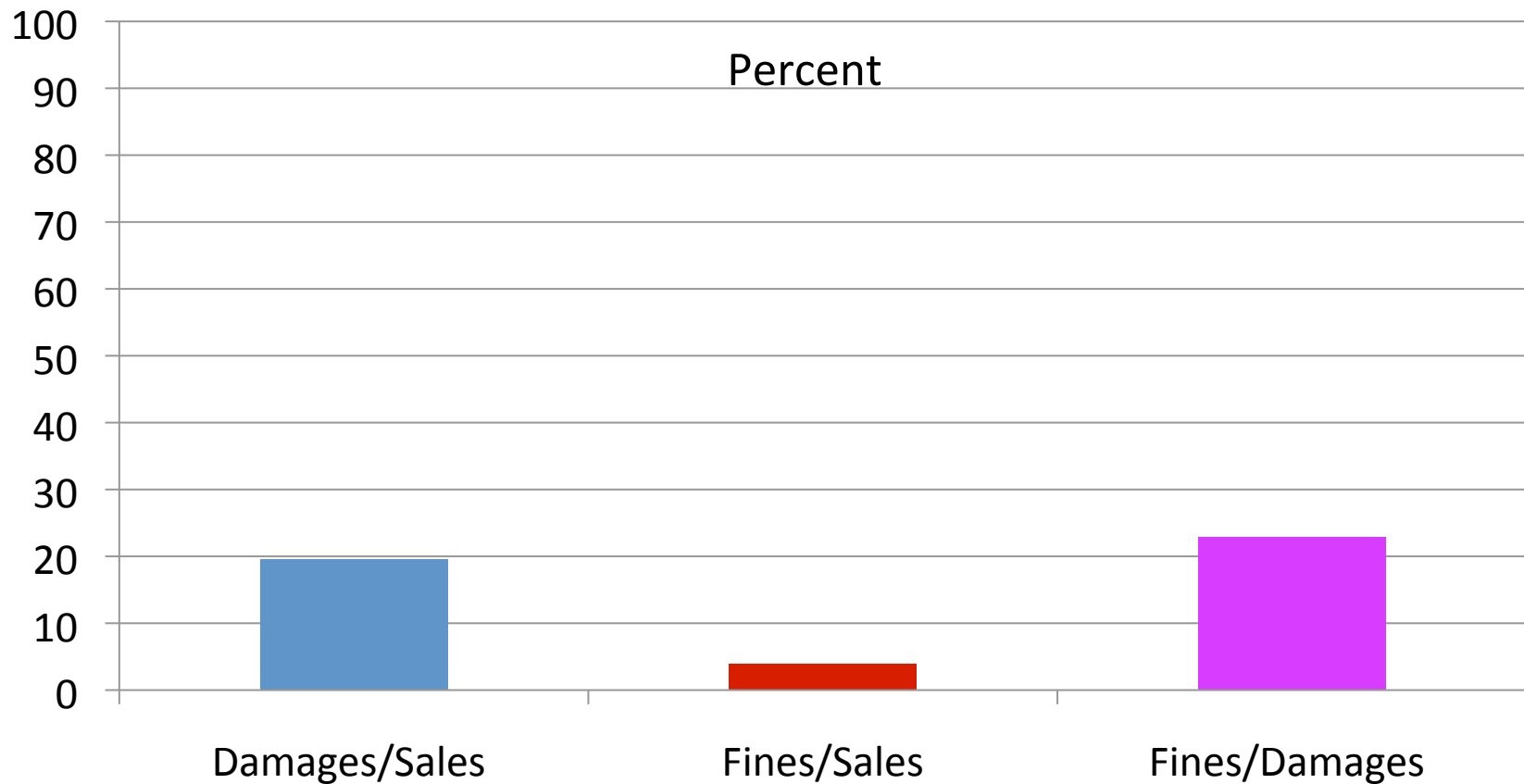
- Here we examine 202 **penalty/damages ratios**:
- *Ex post*, no region has median ratios above 100% (the level of full disgorgement).
- However 60 cartels above 100% : 23 EU, 37 US
- The highest median ratio is 90% for U.S. public and private sanctions combined.
- EU fines average 23% of damages.
- The U.S. ratio is falling, EU's ratio is rising.
- Sanctions on *global* cartels are only 38% of overcharges and are falling after 2000.

U.S. Overcharges, Total Penalties, and Total Penalties/Damages Ratio



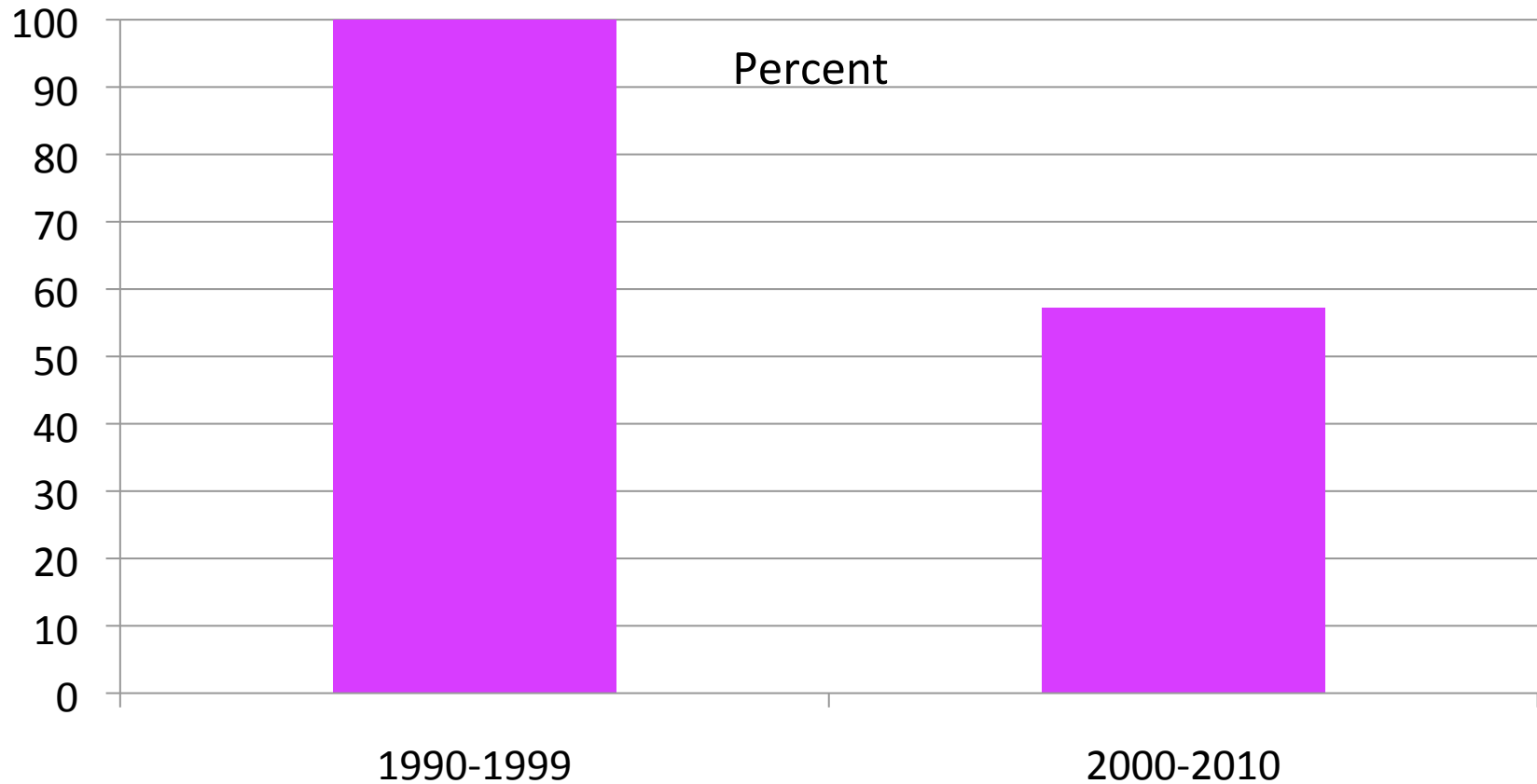
Note: A 100% ratio means full disgorgement of nominal profits.

Combined EU Overcharges, Fines, and Fines/Damages Ratio



Note: A 100% ratio means full disgorgement of profits.

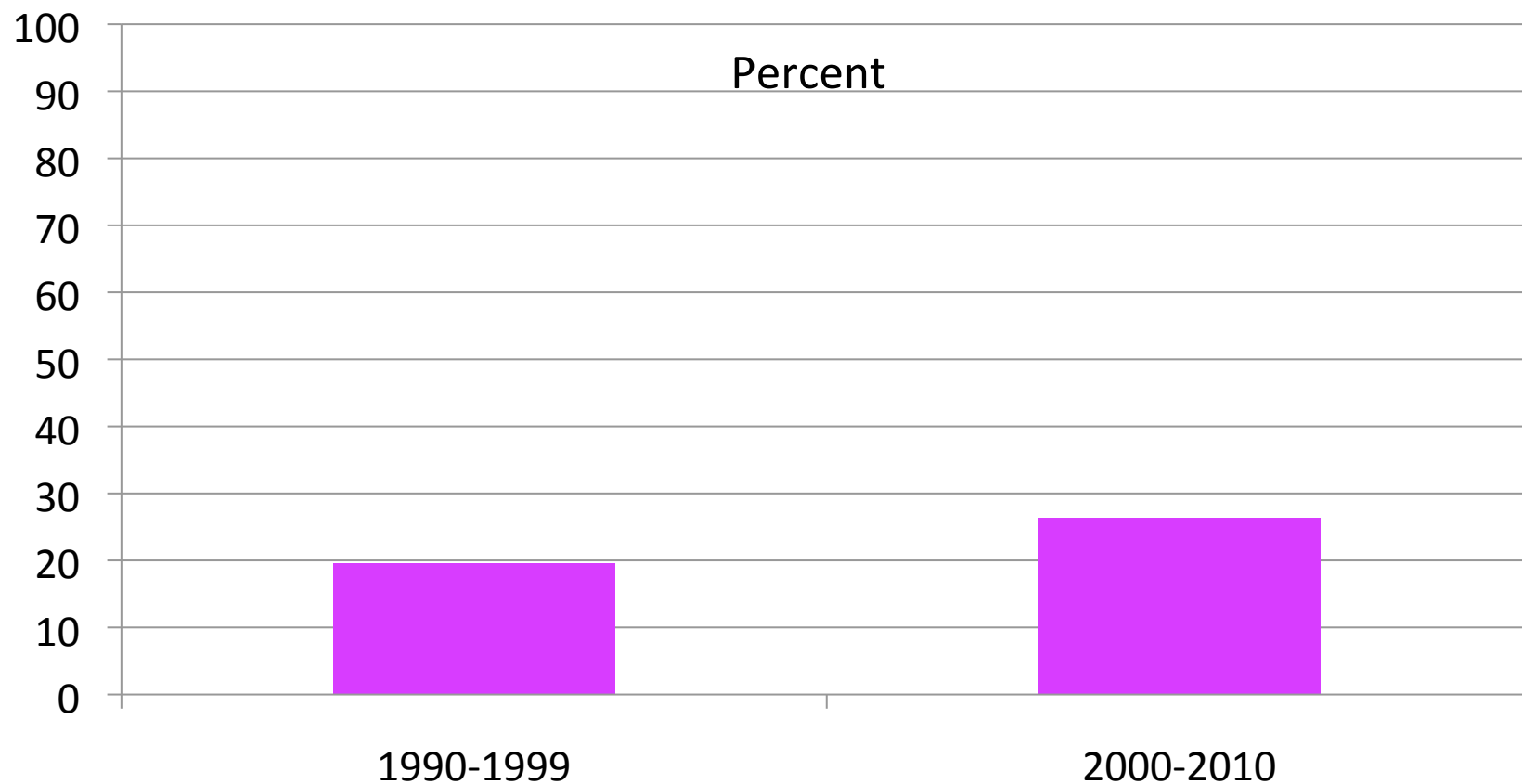
Changes in the US Total Penalties/Overcharges Ratio



Note: Penalties from all US jurisdictions

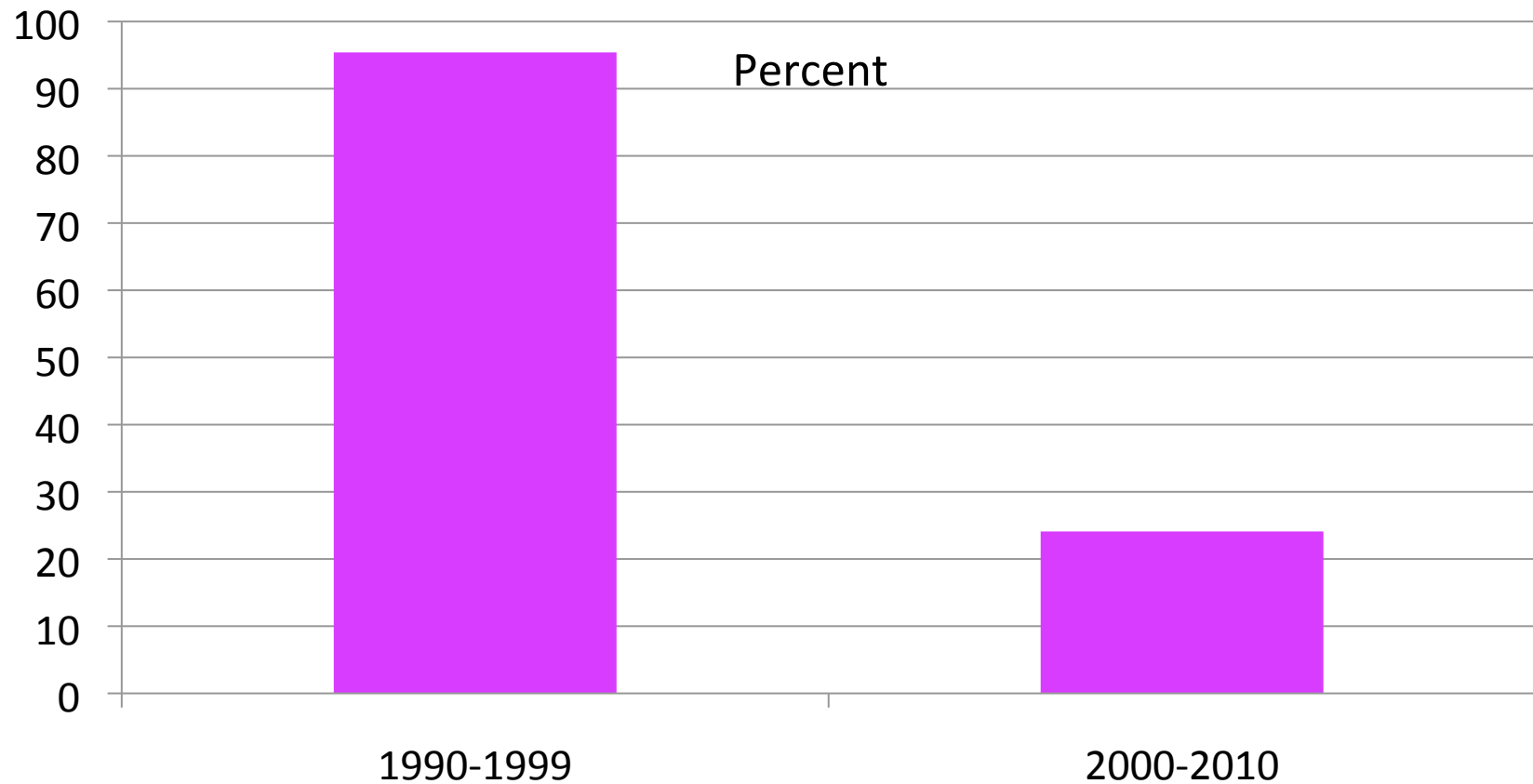
Changes in EU

Total Penalties/Overcharges Ratio



Note: Penalties from the EC and NCAs combined

Global Cartels: Changes in the Total Penalties/Overcharges Ratio



Note: Penalties from all jurisdictions

SUMMARY

- Deterrence of cartel formations requires that (expected) monetary penalties **exceed** the (expected) monetary benefits (profits).
- Indeed, penalties should be about 3X profits.
- No jurisdiction imposes more than 1X profits.
- Severity of penalties is relatively low for global and non-US jurisdictions
- Worse, penalty/damages% generally falling

Sources

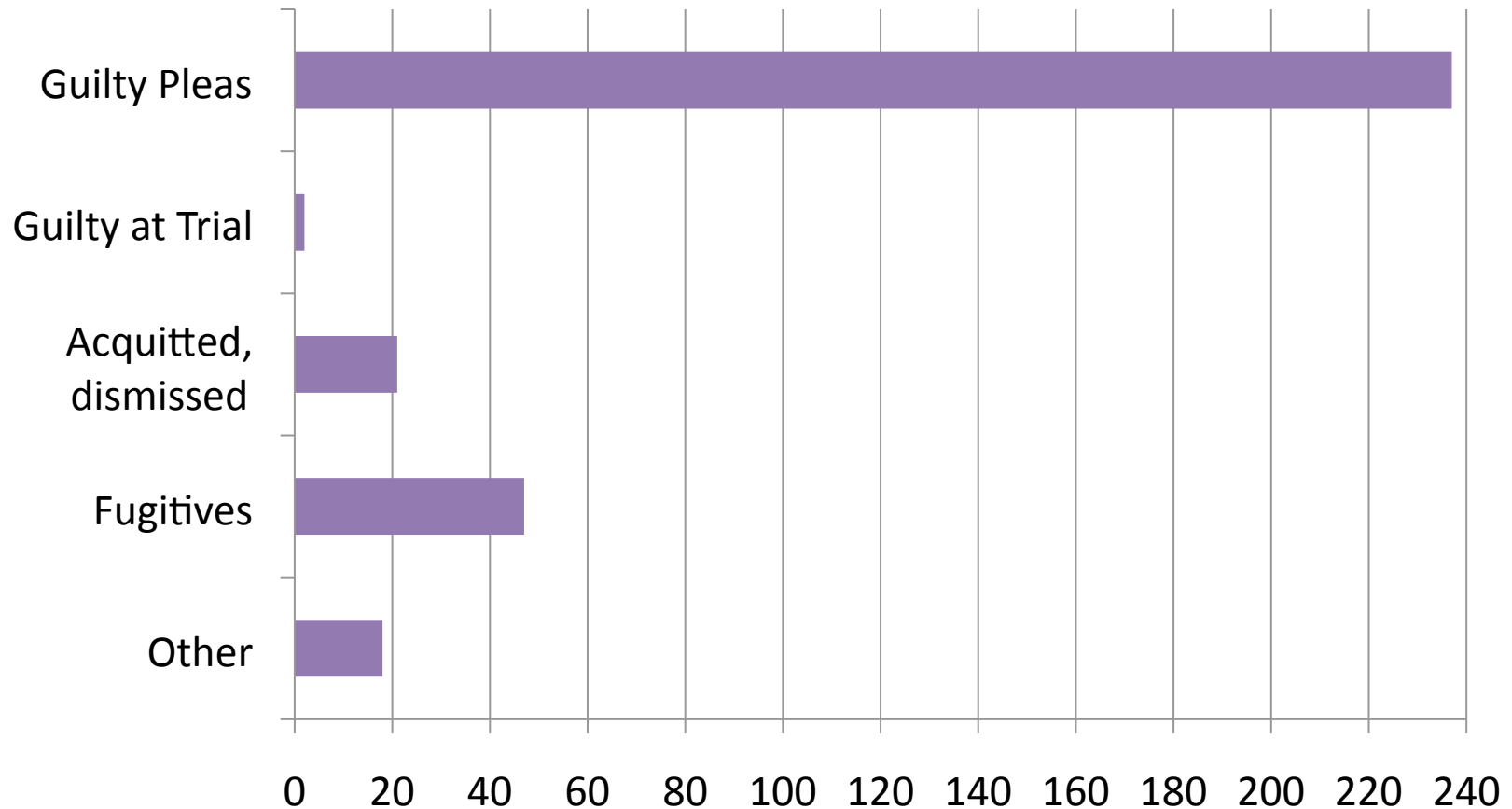
- John M. Connor. *Private International Cartels: Full Data*. [The *PICs* spreadsheet, first created about 1998, is continuously updated. As of March 2011, the full data file was 11MB and consisted of 640 observations of suspected or convicted cartels and 8500 cartelists (companies and individual participants) with 2.8 million cells of data. There are also 13 back-up spreadsheets.]
- John M. Connor. *DOJ Cartel Enforcement 1990-2010*. [A spreadsheet created late 2007 that contains annual budgets, activities, and criminal enforcement actions of the U.S. DOJ with respect to hard-core cartels.]
- John M. Connor and Gustav Helmers. *Statistics on Modern Private International Cartels: Working Paper 07-01*. Washington, DC: American Antitrust Institute (January 2007). [<http://www.antitrustinstitute.org/recent2/567.pdf>]
- John M. Connor. *Cartel Amnesties Granted: Worldwide Whistleblowers* (October 2008, updated). [at SSRN: <http://ssrn.com/abstract=1285469>]

INDIVIDUALS SANCTIONED

- More than 370 managers and directors sanctioned by 15 jurisdictions, but US accounts for most convictions
- However, fewer international indictments result in sanctions.
- Average fines are low: median international is only \$75,000.
- The US is almost unique in imprisoning price fixers*
- Prison becoming more common and more severe over time.
- US prison sentences for price fixers average 16 months.
- At the present rate, the average will reach 40 months by 2015.
- However, median prison for international executives is only 10 months and the time trend is flat.
- Fugitives are a growing problem.
- Fines on executives are rising but insignificant.

* Israel and Japan are the only other jurisdictions of significance

Disposition of Executives Charged by the DOJ for International Price-Fixing



Note : Totals 325 executives from 1990 to 2010.

Upward Trend in Mean Length, US Prison Sentences for All Price Fixers

