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**CARTELS PORTRAYED:  
DETERRENCE EFFECTS OF PENALTIES  
A 21-Year Perspective, 1990 to 2010**

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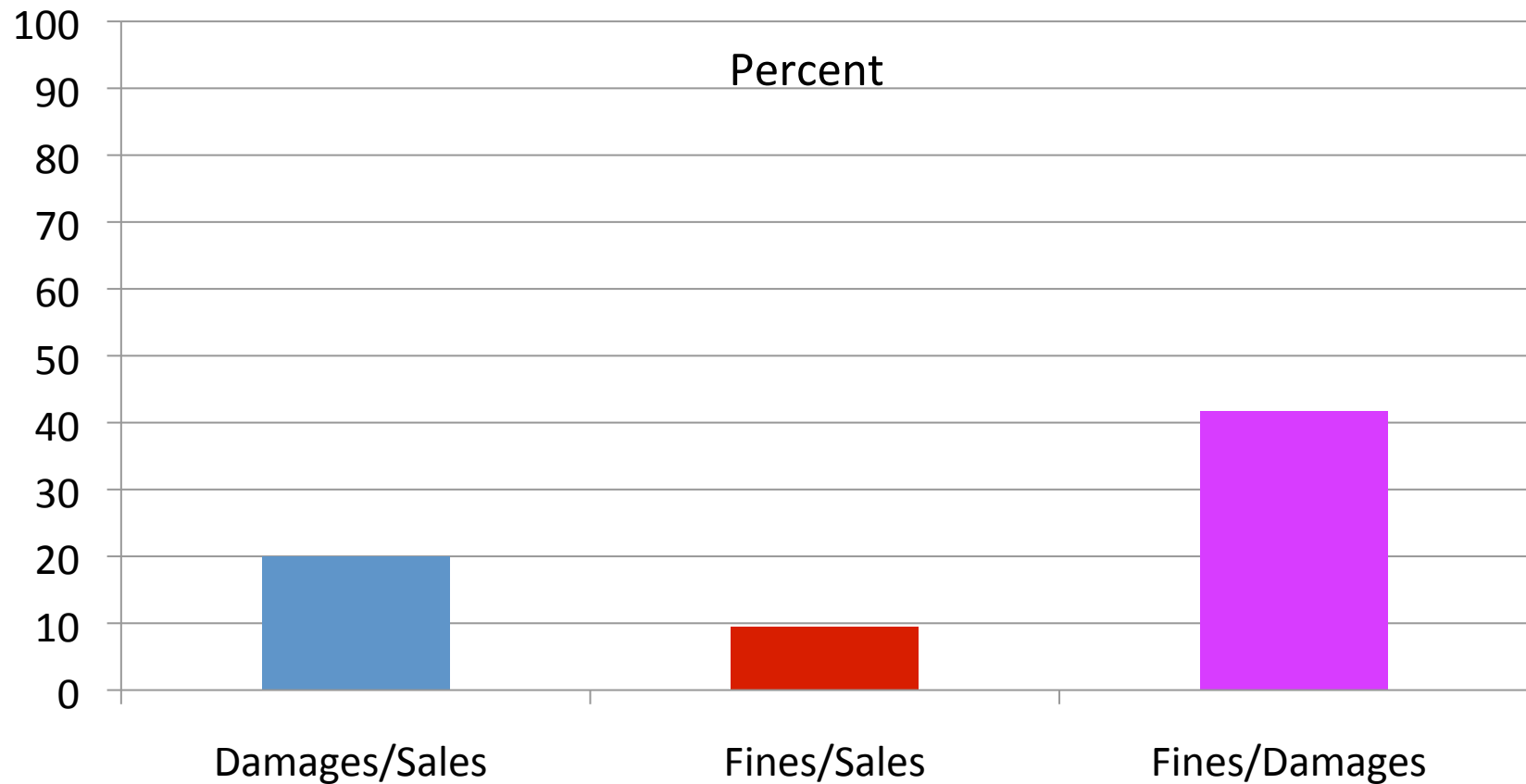
# Introduction

- The following charts illustrate the global size and economic impacts of the modern international cartel movement and the enforcement responses of the world's antitrust authorities and national courts.
- The sample encompasses 640 private hard-core cartels that were subject to government or private legal actions (*i.e.*, formal investigations, damages suits, fines, or consent decrees) between January 1990 and December 2010. Each cartel had participants with headquarters in two or more nations. The sample is believed to be a reasonably complete list of all *contemporary private international cartels* discovered by jurisdictions with an active press or informative antitrust-authority Web site.
- All monetary data are expressed in nominal U.S. dollars using exchange rates during the cartel's life or on the day a legal action was announced.
- A special effort is made to create charts that illustrate **trends** in cartel dimensions and antitrust decisions.

# DETERRENCE EFFECTS of PENALTIES

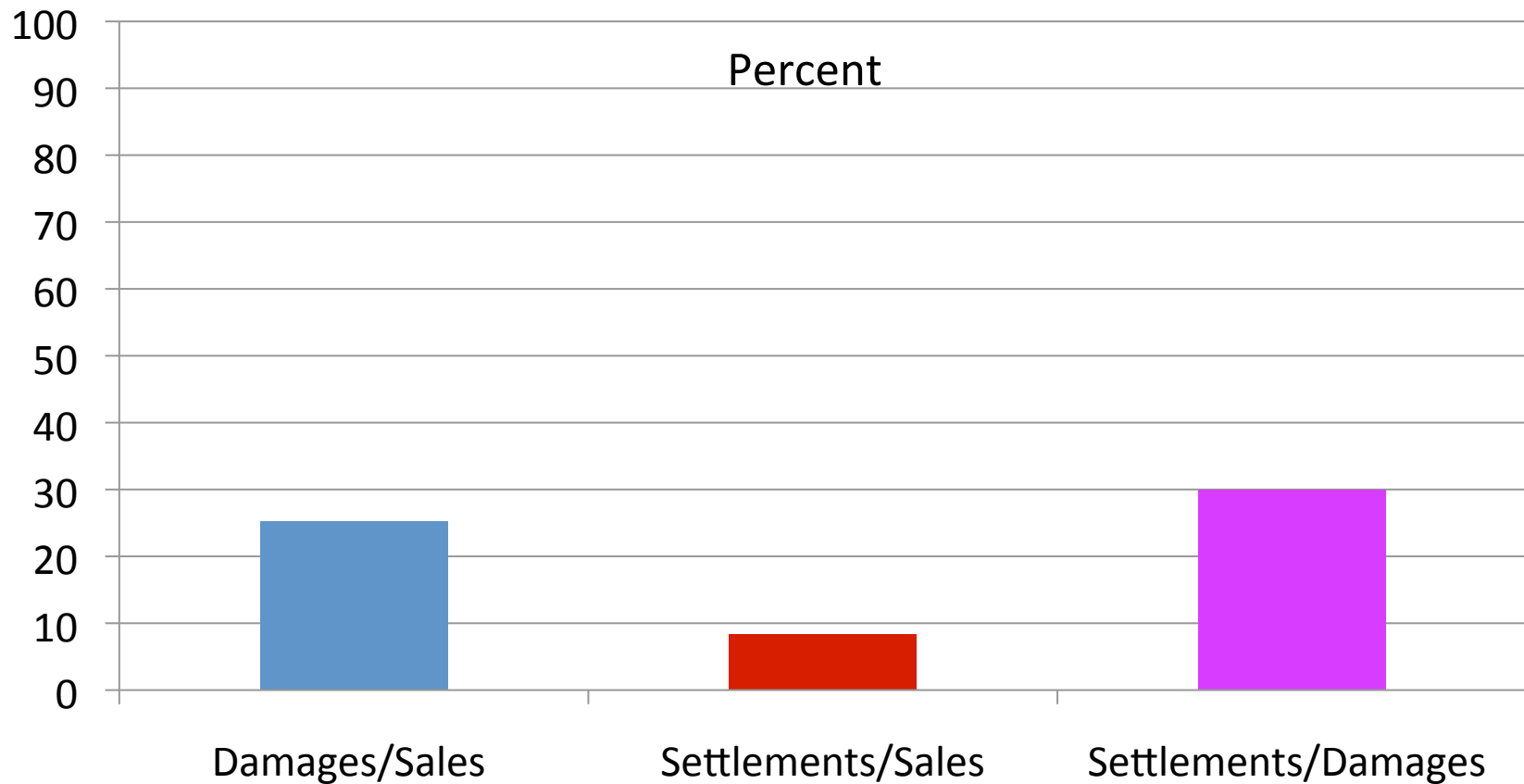
- Here we examine 202 **penalty/damages ratios**:
- *Ex post*, no region has median ratios above 100% (the level of full disgorgement).
- However 60 cases above 100% : 23 EU, 37 US
- The highest median ratio is 90% for U.S. public and private sanctions combined.
- EU fines average 23% of damages.
- Sanctions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

# U.S. Overcharges, Fines, and Fines/ Damages Ratios



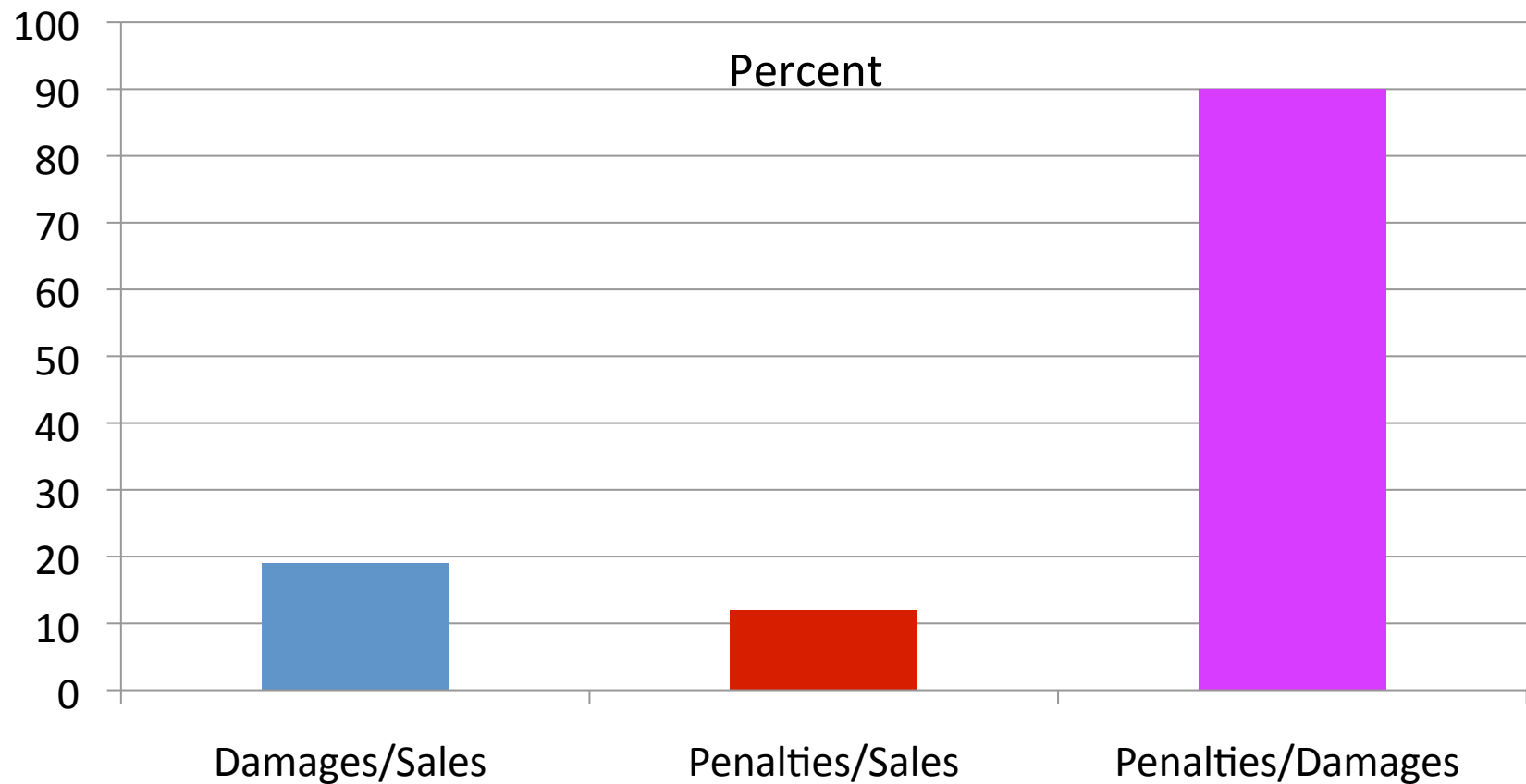
Note: A 100% ratio means full disgorgement of profits.

# U.S. Overcharges, Settlements, and Settlements/Damages Ratio



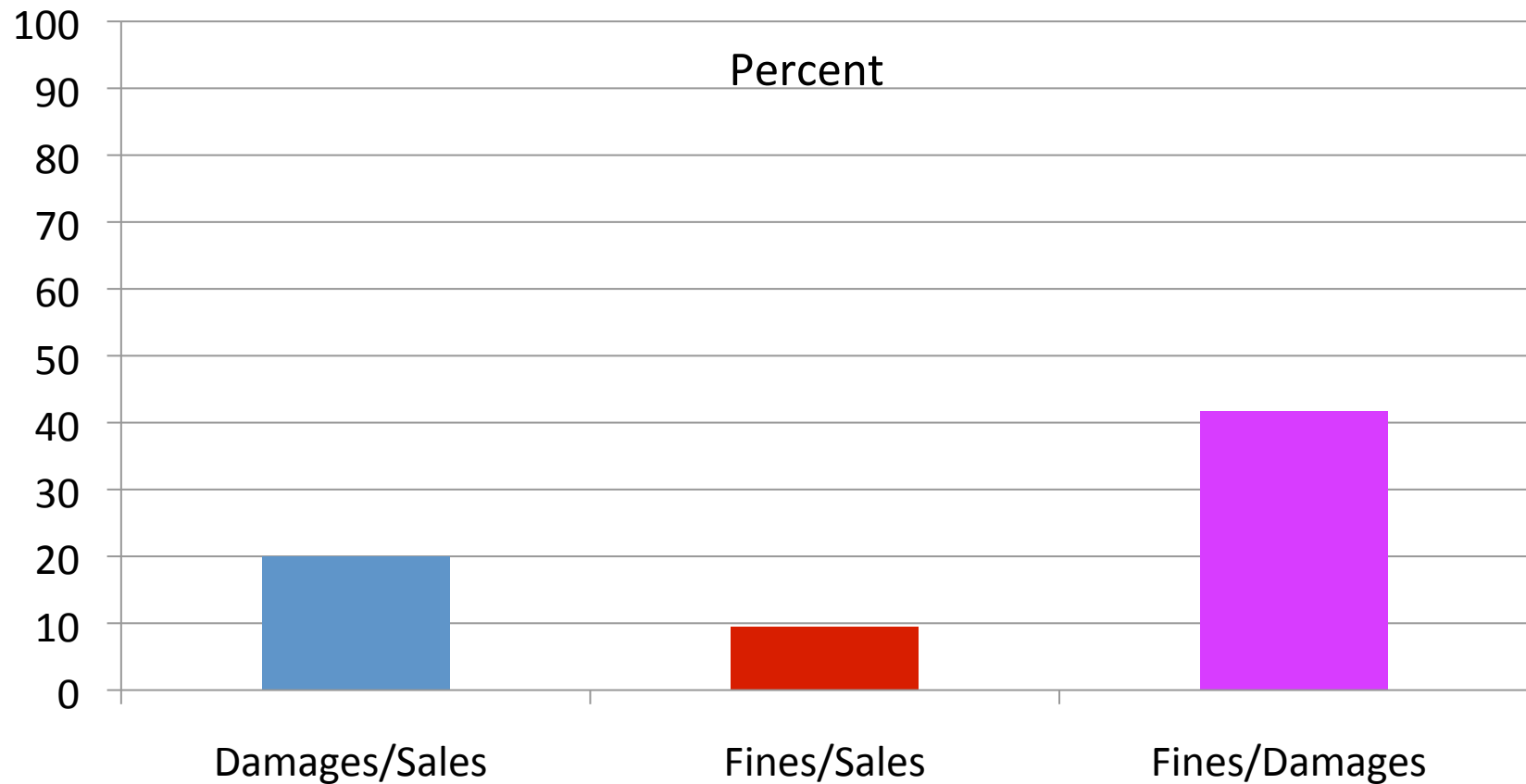
Note: A 100% ratio means full disgorgement of profits.

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



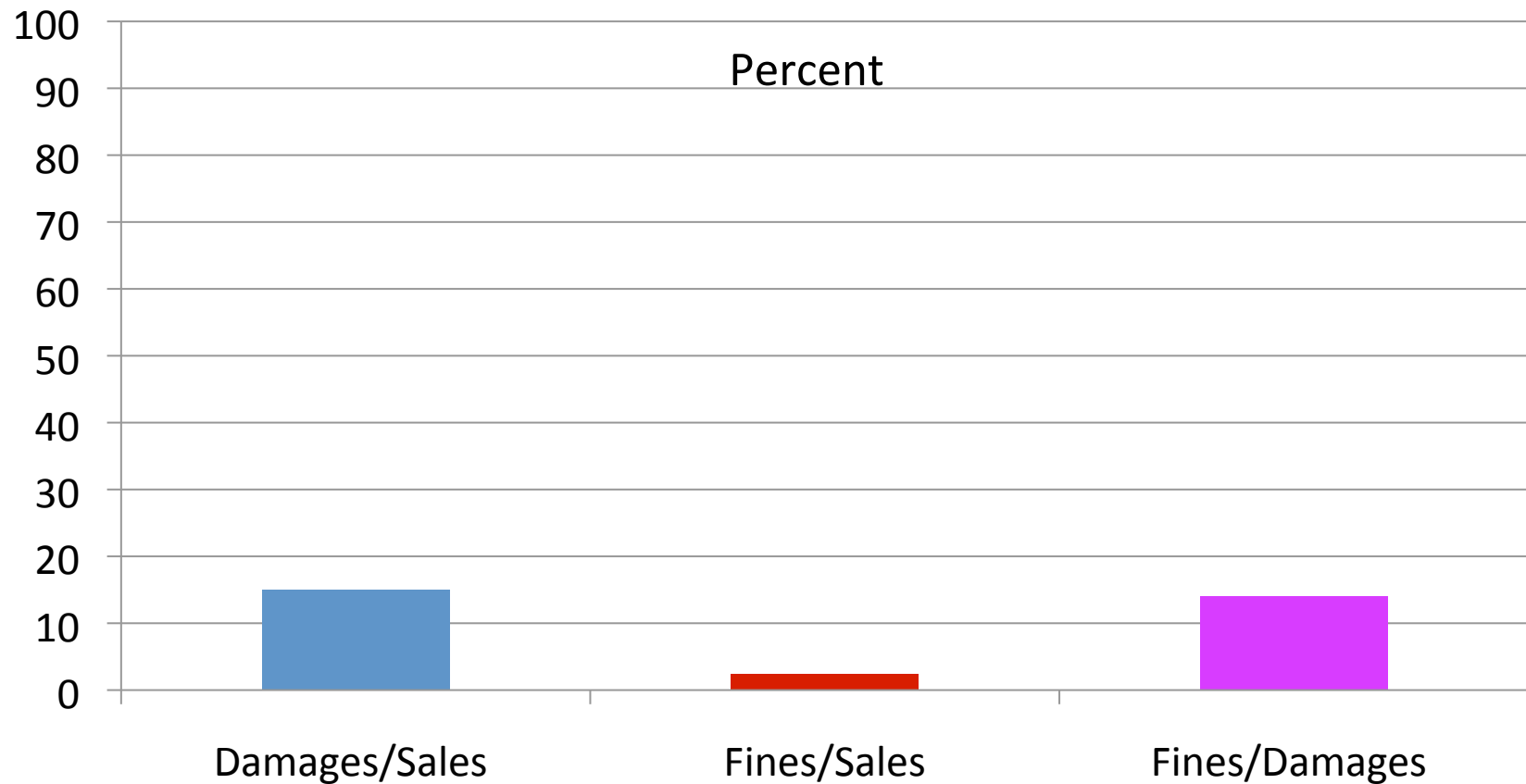
Note: A 100% ratio means full disgorgement of profits.

# EC Overcharges, Fines, and Fines/ Damages Ratio



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

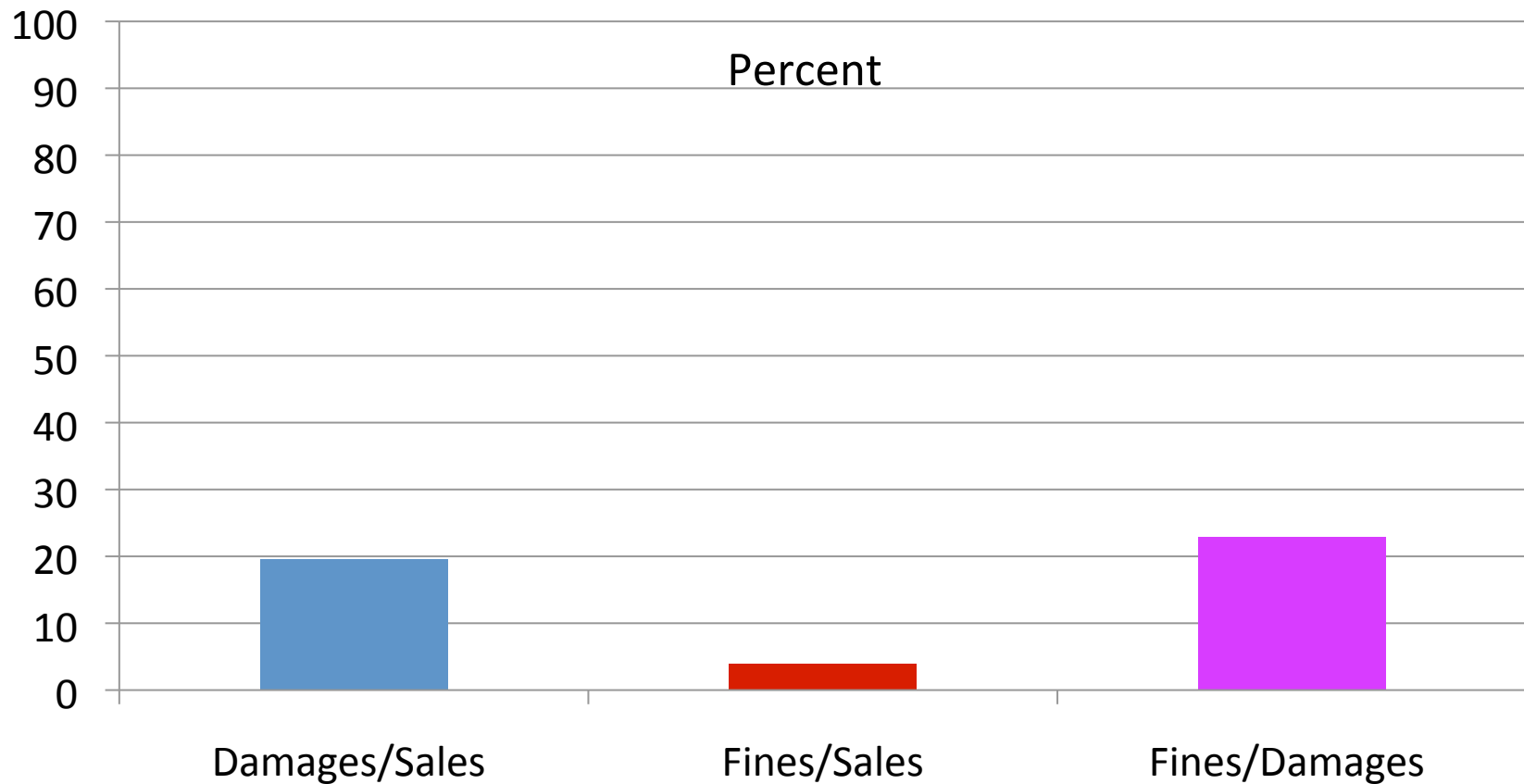
# EU NCAs Overcharges, Fines, and Fines/Damages Ratio



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

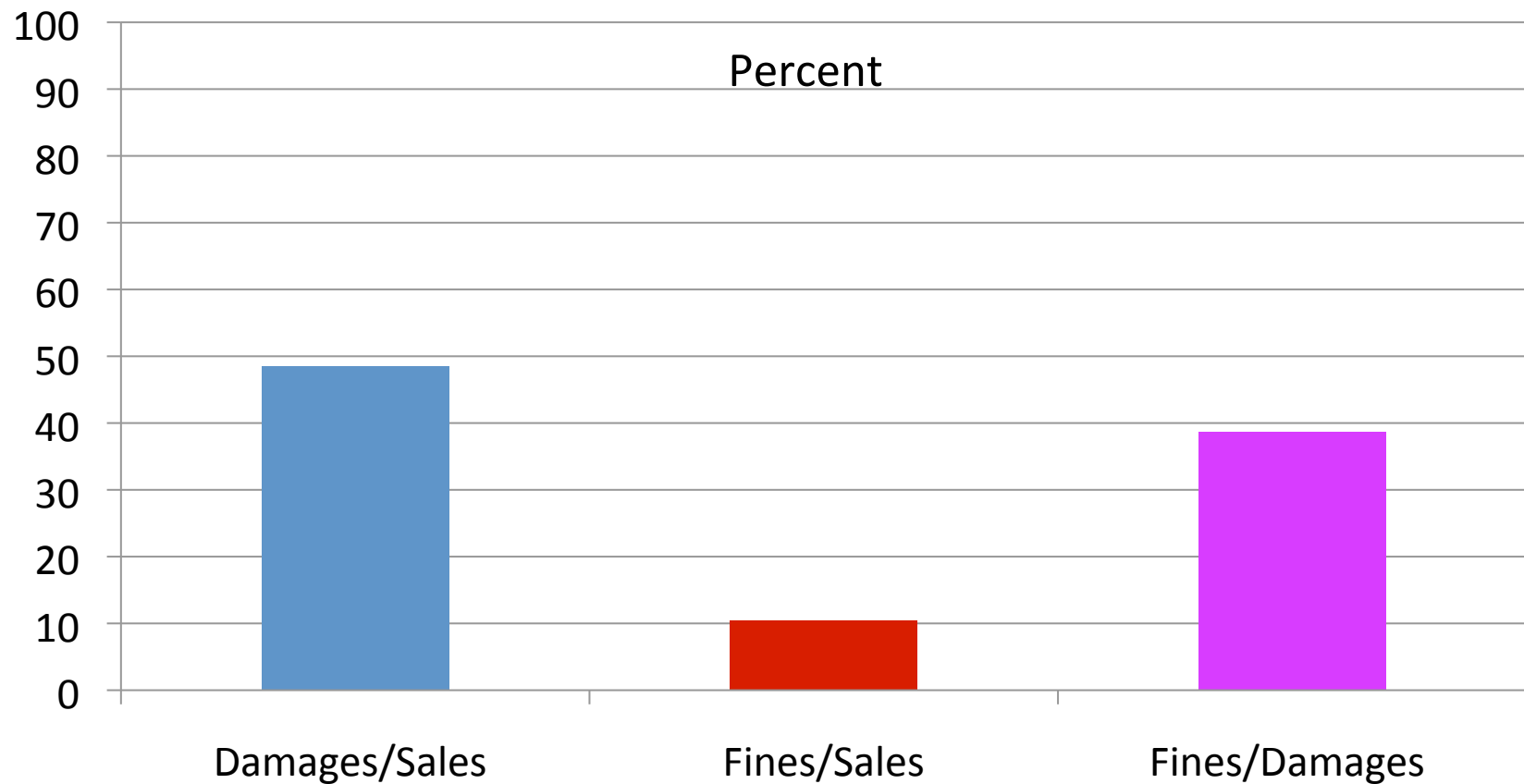


# Combined EU Overcharges, Fines, and Fines/Damages Ratio



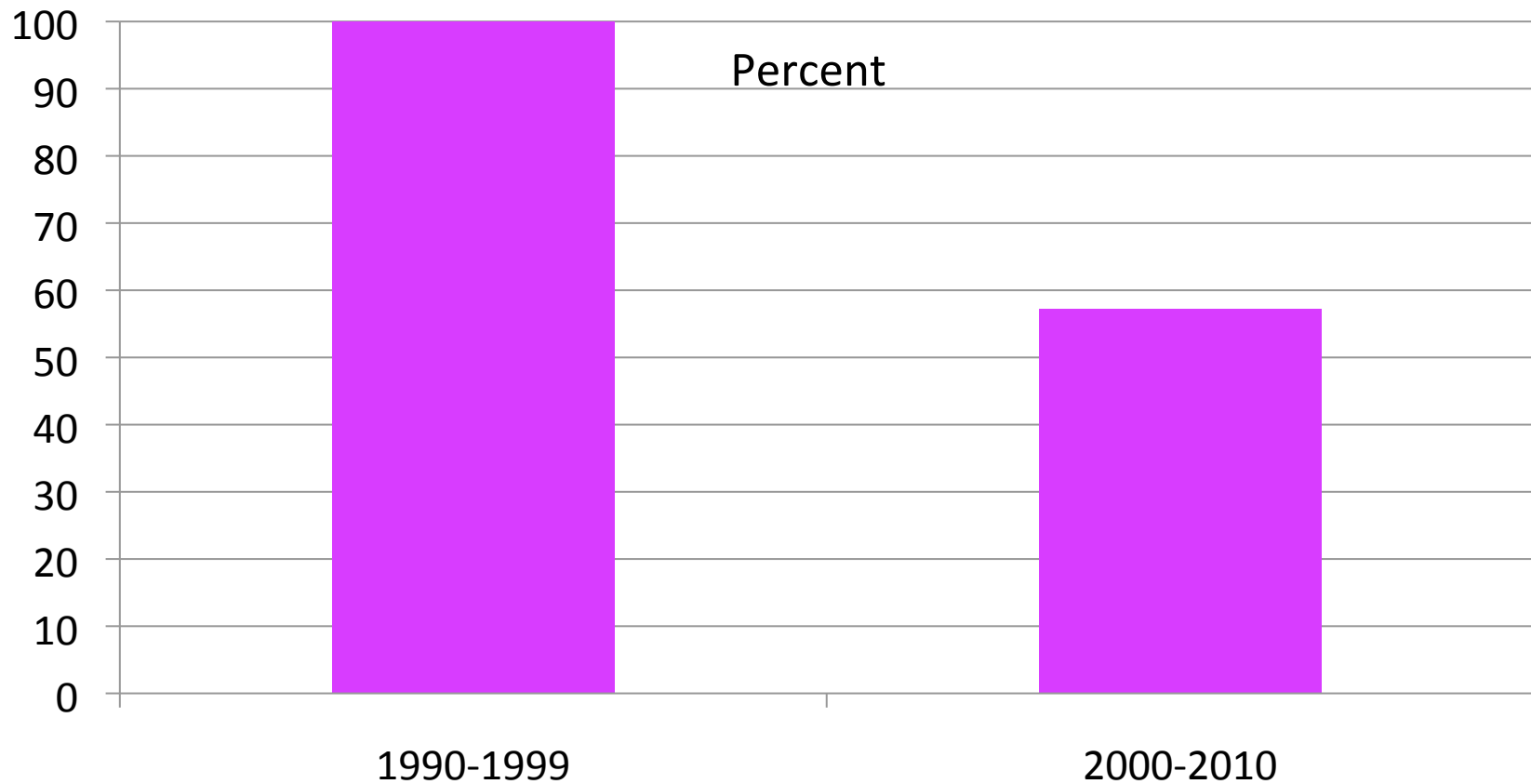
Note: A 100% ratio means full disgorgement of profits.

# Global Cartels' Overcharges, Fines, and Total Penalties/Damages Ratio



Note: Penalties from all jurisdictions

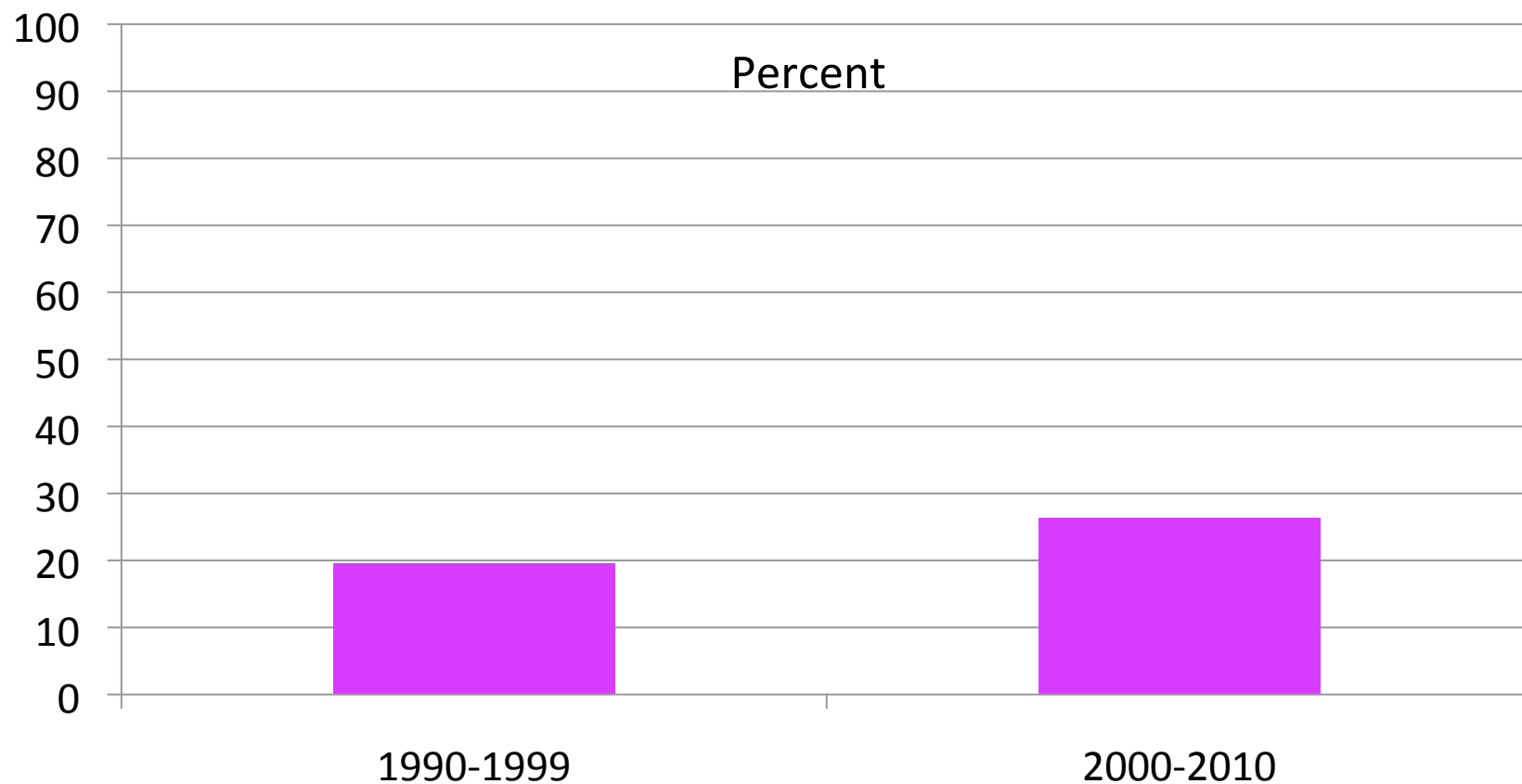
# Changes in the US Total Penalties/Overcharges Ratio



Note: Penalties from all jurisdictions

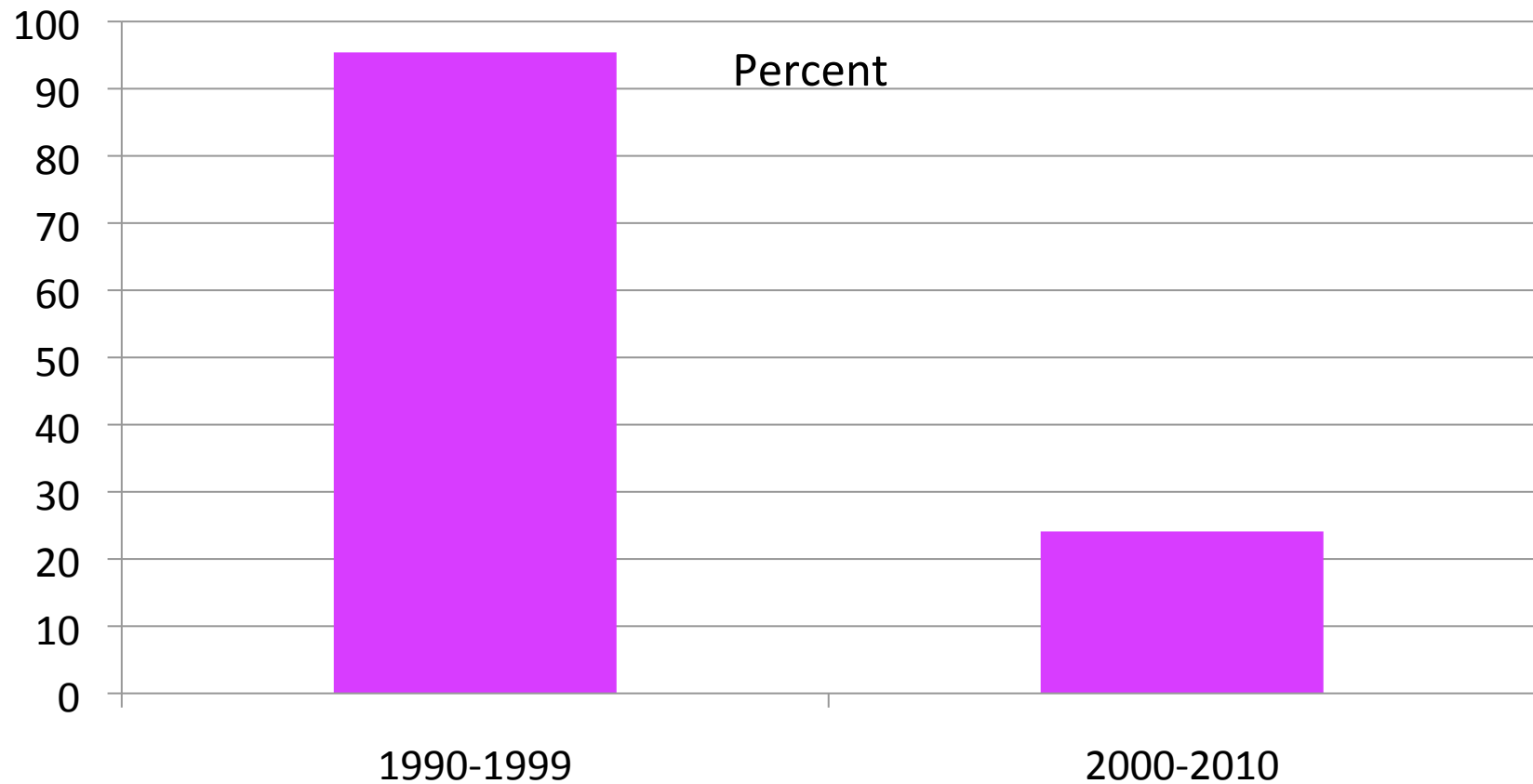
# Changes in EU

## 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 3X profits.
- No jurisdiction imposes more than 1X profits
- Penalties are 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>]

# Notes

- Slide 4: 45 cartels with both damages and U.S. fines available. All numbers based on current dollars.
- Slide 5: 73 cartels with both damages and U.S. settlements available. All numbers based on current dollars.
- Slide 6: 97 cartels with both damages and either U.S. fines or U.S. settlements (or both) available. All numbers based on current dollars.
- Slide 7: 55 cartels with both damages and EU fines available. All numbers based on current dollars.
- Slide 8: 51 cartels with both damages and EU fines available. All numbers based on current dollars.
- Slide 9: Combines 50 EC and 55 EU NCA decisions with both damages and EU fines available. All numbers based on current dollars.
- Slide 10: 61 cartels with all necessary data available. All numbers based on current dollars.
- Slide 11: 97 cartels with all necessary data available. All numbers based on current dollars.
- Slide 12: 102 cartels with all necessary data available: 51 EC and 51 EU NCAs, 29 from 1990-1999 and 73 from 2000-2010. All numbers based on current dollars.
- Slide 13: 61 cartels with all necessary data available. All numbers based on current dollars.