

How robust is international drug trafficking?

Peter Reuter

University of Maryland

No conflicts of interest or outside funding to declare

Lisbon Addictions, 2022



Three questions about drug trafficking

How has international drug trafficking changed since 2010?

How robust is international drug trafficking to enforcement?

Does the increasing number of countries with weak to failed governments and/or civil war have implications for global drug supply?

Economics is useful for the study of drug markets

- Demand and supply side standard classification of interventions
 - Many interventions have both supply and demand side effects
- Drugs are (mostly) sold in markets
 - Social networks also play a role
- The price of drugs matters
 - Illegal heroin would cause fewer problems if a dose cost \$1 per rather than \$25
- Thus understanding what determines the price of drugs is important

Economics is useful for the study of drug markets

- Demand and supply side standard classification of interventions
 - Many interventions have both supply and demand side effects
- Drugs are (mostly) sold in markets
 - Social networks also play a role
- The price of drugs matters
 - Illegal heroin would cause fewer problems if a dose cost \$1 per rather than \$25
- Thus understanding what determines the price of drugs is important
- **Economists have been less useful than economics**
 - Too focused on econometric analysis of poorly understood data

Examples of useful economic insights

- Coca and opium farmers usually earn little more than other farmers in their region
 - Refiners only pay the opportunity cost of land and labor
 - Intense eradication raises risk and earnings
- More effective interdiction may increase source country exports (Henry, 1988)
 - Lowers consumption by raising price
 - Increases kilograms exported per kilogram consumed
 - Second effect probably larger than first
- Low earnings of drug retailers interpreted as effectively entering a lottery to become a high level dealer
 - “Why drug dealers live at home” (Levitt and Venkatesh, 2000)

Drug markets are embedded in economic and political developments generally

- **Mass drug markets are a late 20th century development reflecting**
 - Demand side changes: affluence, individualism, changing values generally
 - Supply side: new drugs and production technologies, increased connectivity both internationally and domestically
- **Other new illegal markets reflect similar developments**
 - Human smuggling and trafficking
 - Rising differentials in income levels across countries/regions motivate supply of labor willing to take on high risk low reward jobs
 - Decline of European labor available for same jobs
 - ...
 - Counterfeit pharmaceuticals
 - Advances in chemistry
 - Rising demand for better health
- **Globalization is a common thread**

Recent changes in drug trafficking

The shock of fentanyl

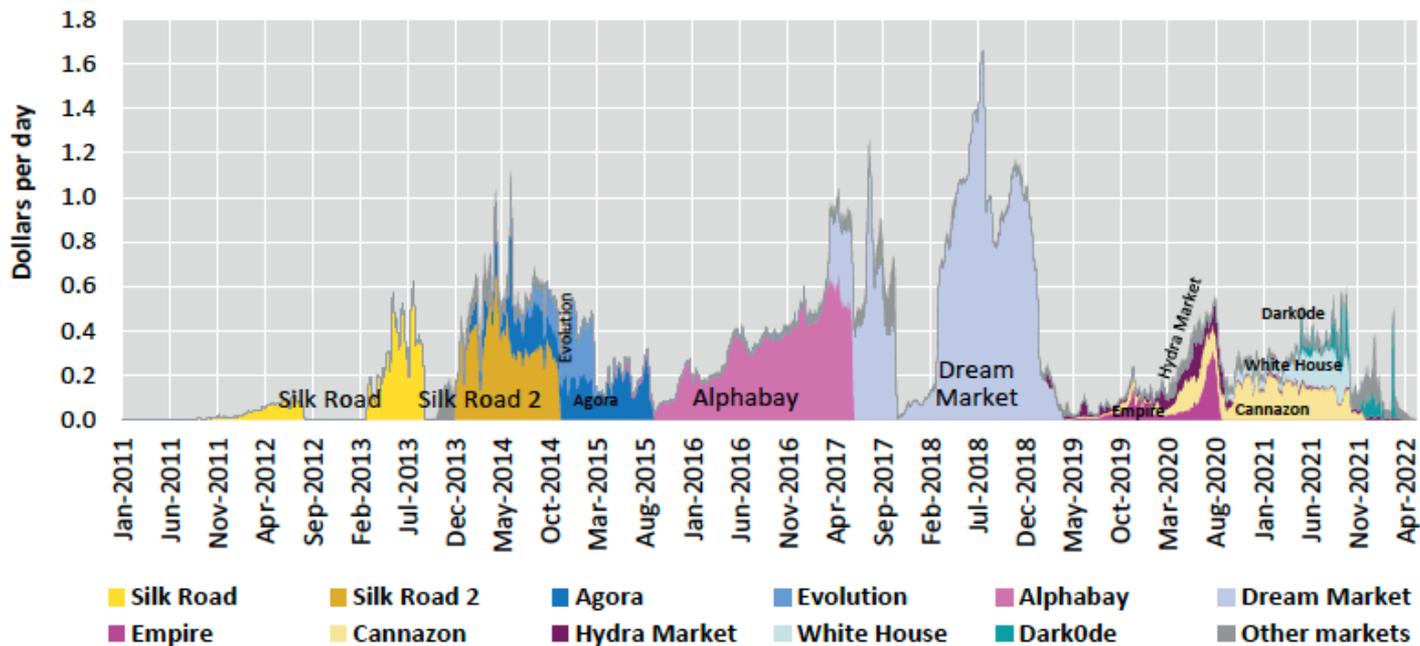
- **Almost exclusively a North American problem**
- **Not a new drug epidemic but a sharp increase in the lethality of the drug supply**
 - Low cost alternative opioid for dealers
 - Initially only heroin but now found mixed with psychostimulants
- **From 2014-2019 it presented an innovation in trafficking: direct shipment from quasi-legitimate producers in China to dealers in the United States**
 - Postal service and private shippers such as FedEx sending very small packages
 - Largely cut out traditional traffickers
- **Since China's 2019 ban on fentanyl production, largely in hands of Mexican DTOs**
 - Precursors shipped to Mexico and then smuggled into the US
- **Major puzzle; why is fentanyl still uncommon in other countries with large heroin markets?**
 - Are UK and Australian heroin dealers/traffickers more concerned about the wellbeing of their customers?
 - Why so variable penetration within the United States and (to a lesser extent) Canada?

Globalization transforms drug trafficking

- **Increasing mobility of labor, capital and goods**
 - Easier to hide illegal drugs in large pipeline of legal goods
- **International travel comparatively easy**
 - Senior managers can supervise deliveries in destination markets
- **Increasing integration of national societies**
 - More immigrants from transit countries in wealthy consumer countries
- **Mass culture homogenizes tastes**
 - Innovations of US legal cannabis markets show up in illegal European cannabis markets
- **Communication technology facilitates collaboration**

Puzzle: Internet still a minor element of drug trafficking, despite improved information flow it offers customers

FIG. 32 Daily sales (minimum, mostly drugs) on 38 major global darknet markets, 2011–2021



Source: UNODC analysis based on dark web data (see online Methodological Annex).

US heroin imports reflect changing legal trade and traffic

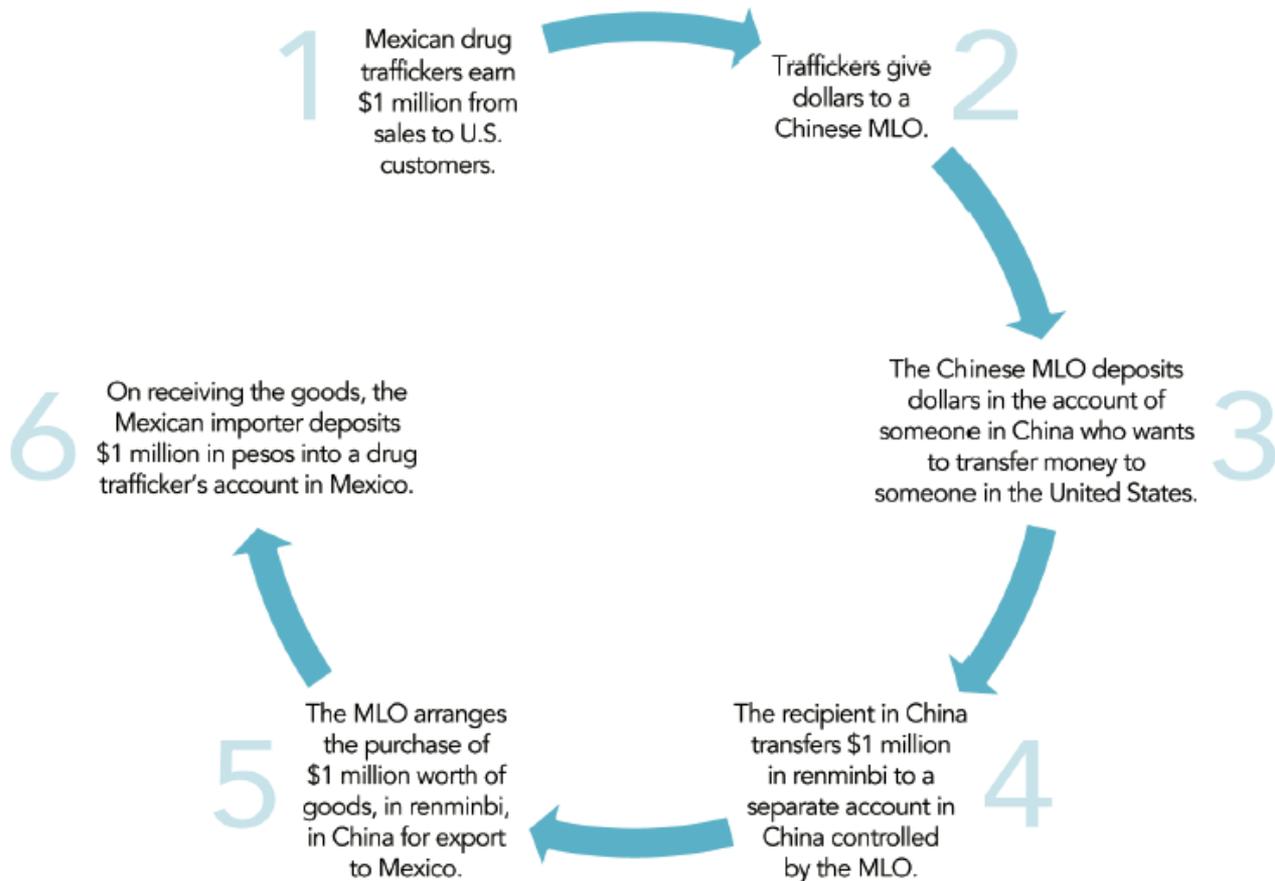
- **US heroin market sources have shifted sharply**
 - Southeast Asia (1980s)
 - Colombia and Mexico (1990s)
 - Mexico (2005-)
- **Afghanistan, dominant global producer, minor supplier to the US**
- **Why?**
 - Mexico's production costs much higher but Mexico increasingly efficient smuggling source as traffic and commerce expanded following NAFTA
 - Creates larger pipeline in which to hide heroin
 - Smuggling costs far higher than production costs

Money laundering as a global market

- **Criminals have increasing array of choices**
 - Trade Based Money Laundering
 - Shell companies in the Cook Islands
 - ...
- **New technologies for moving value e.g.**
 - Electronic platforms (stored value cards)
 - block chain technology (Bitcoin, monaro)
- **Old institutions benefit too**
 - Hawalas more efficient in settling balances

Figure I.1

Chinese Money Laundering of Drug Revenues



NOTE: MLO = money-laundering organization.

Drug Traffickers infrequently exploit new ML methods

- **Colombian drug smugglers in Netherlands used expensive, risky, slow method for moving cash through 2010 at least (Soudijn and Reuter, 2016)**
 - Convert cash to 500 Euro notes
 - Pay couriers to bring cash in luggage to Colombia
 - Costs 10-15% of amount smuggled
- **Costs using legitimate financial system <5%**
 - E.g. Black market peso system in US
- **Most Money Laundering cases involving drug trafficking show classic old methods: e.g.**
 - Cash being transported across borders
 - Black Market Peso (TBML)

**Response to
interdiction and
other high level
enforcement**

The conventional wisdom

- **Toughness against one producing/trafficking region/country will lead at most to dispersal to other locations**
 - “balloon effect”
 - Relabeling of standard economic proposition in international trade
- **Consequences for final markets slight**
 - Price and availability minimal effect minimal
- **Shift of cocaine routes from Caribbean to Mexico in 1980s is prime example**

How strong is the evidence?

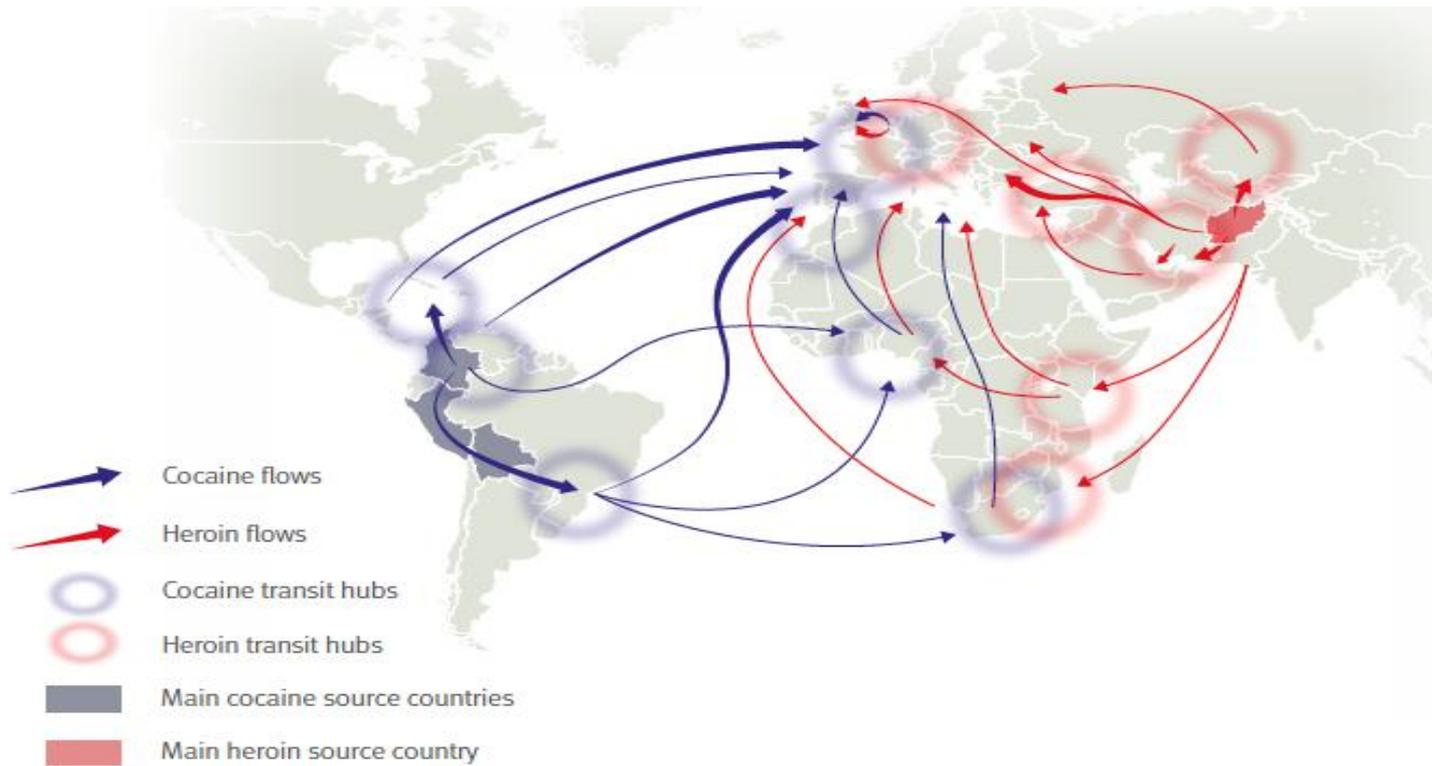
- **Research on eradication/crop substitution focused on local effects**
 - Does program reduce production in targeted area?
 - Little systematic study of impact on production elsewhere
- **Minimal research on interdiction generally**
 - No empirical studies since 2000
- **Global interdiction of cocaine and heroin has apparently increased in intensity**
 - Ca. 45% of cocaine production seized in recent years
 - 20%? for heroin
- **No indication that prices have risen since 2008**

How do traffickers choose routes?

- **Basic model: Assume they aim to minimize cost per kilo**
- **Principal costs are risk related**
 - Loss of drugs
 - Punishment of couriers → high costs of labor
 - Seizure of assets (transportation, financial)
- **Bribes attempt to mitigate risks**
- **Model not validated**
 - Noisy estimates for flows
 - No indicators of bribe susceptibility

Interdiction only one determinant of risk

- **Why cross more than one border?**
 - Interdiction risk is not uniform for destination country
 - specific to originating country
- **Multiple borders may be lower risk than original Colombia-US**
 - Colombia-Chile-US may generate little attention
 - Depends, inter alia, on flow of legitimate commerce and traffic
- **May be large intra-marginal rents for corrupt officials**
 - Information flows poorly so no global market
- **Balloon effect may be rare**

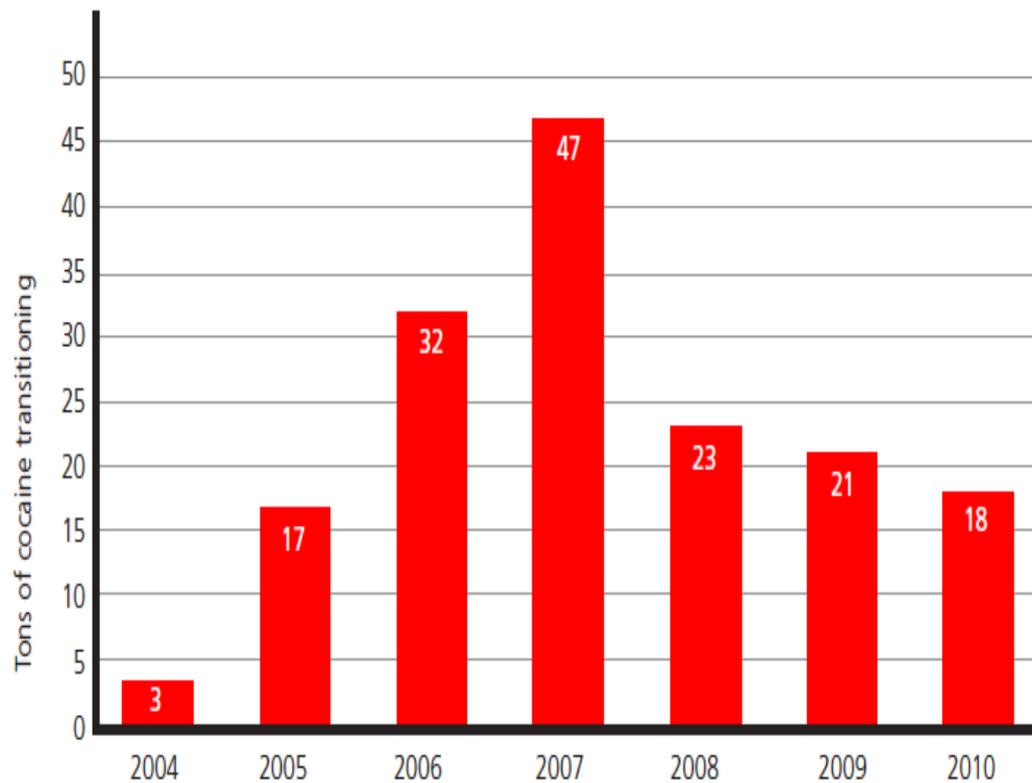


Source: National Crime Agency, 2020

Dutch Antilles crackdown example of balloon effect

- **Flights NL Antilles to Schiphol in 2001 major cocaine route**
 - 1300 arrested estimated to be just 5% of total couriers
- **100% search of passengers in Aruba airport in 2003**
 - Up to 3 kg. seized but no arrest
- **Proximate result: drastic reduction in traffickers arrested**
 - 17 in 3rd quarter of 2006
- **Emergence of West Africa route**
 - Estimated cocaine transiting West Africa to Europe from 3 tons in 2004 to 47 tons 2007
 - Guinea Bissau and Ghana most visibly affected
- **Tough European interdiction shifted much after 2010**

1. Tons of Pure Cocaine Transiting West Africa on their way to Europe.



Source: UNODC estimates.

Is Mexican crack-down a counter-example?

- **MX government raised risks of trafficking cocaine through Mexico**
 - Not classical interdiction but analytically equivalent increase in risk
 - Many leading traffickers incarcerated or killed by government
- **Minor shift of some cocaine activities to central America**
 - Storage and processing
 - DTO managers use Guatemala, Honduras as safe-house
- **Mexico remains dominant cocaine entry point to US**
 - Cocaine prices rose 2007-2010 but then fell
 - Why did heroin and marijuana prices not increase in 2007?
- **DTOs fragmented in response to crackdown, with sharp increase in homicides**

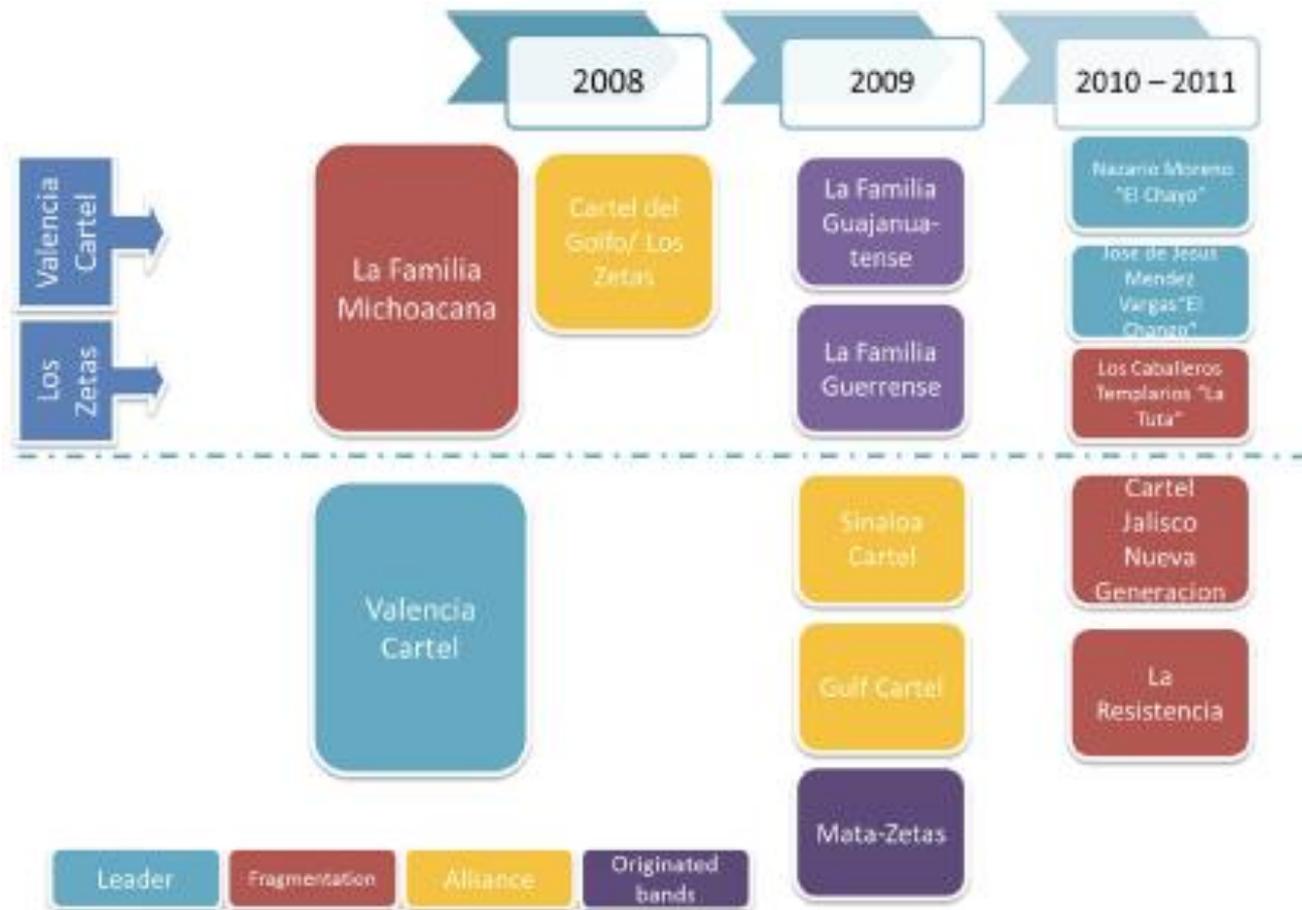


Fig. 7 Evolution of La Familia Michoacana

Is Mexican crack-down a counter-example?

- **MX government raised risks of trafficking cocaine through Mexico**
- **Minor shift of some cocaine activities to central America**
- **Mexico remains dominant cocaine entry point to US**
- **DTOs fragmented in response to crackdown, with sharp increase in homicides**
- ***Hypothesis: Enforcement can only modestly reduce trafficking but can shape it***

Colombian government vs. Cali and Medellin cartels

- **Cali, Medellin cartels large, hierarchical organizations**
 - Primarily drug trafficking
 - Developed broad criminal interests (extortion, land seizures...) built on capacity for violence
- **Challenged government**
 - Assassinated leading presidential candidate 1989
 - Downed commercial airplane, conducted terror campaign
- **National government launched police and military campaign**
 - Killed Escobar
 - Incarcerated or killed other leading traffickers

Outcomes of campaign

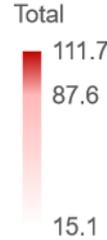
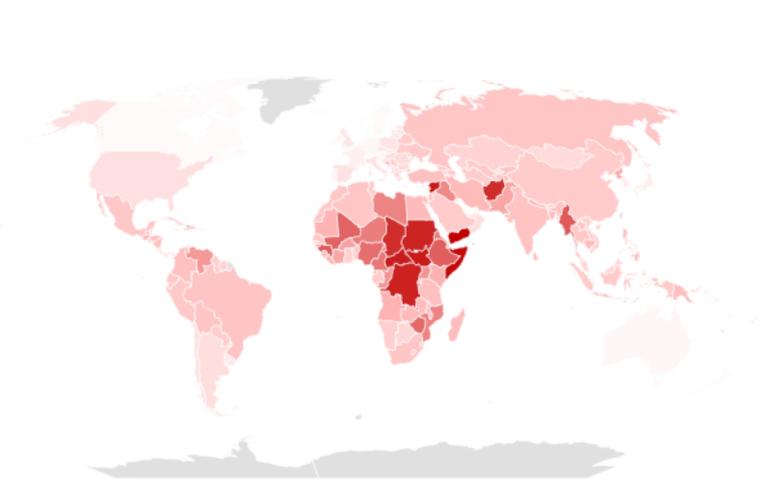
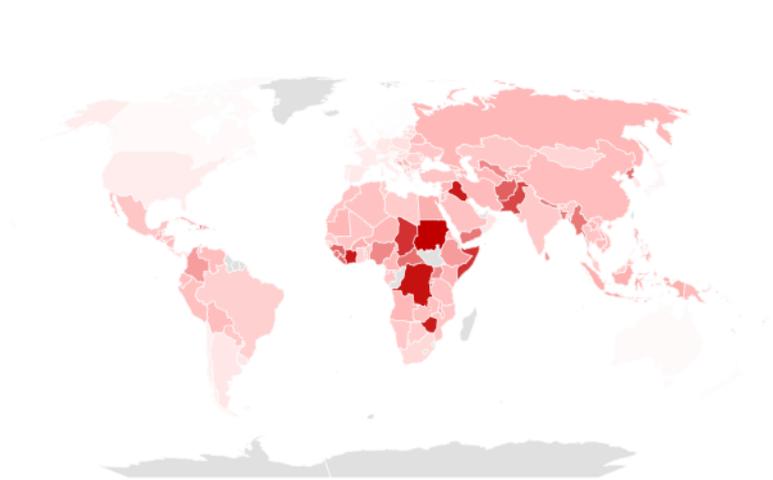
- **Cali and Medellin cartels ceased to exist after 1995**
- **Cocaine trafficking shifted to smaller enterprises**
 - No reduction in flow of cocaine exports
 - No increase in price
- **Was this a success?**
 - No further criminal challenge to power of state
 - Did this facilitate the rise of the paramilitary?

The role of civil conflict

Increasing number of countries with civil war and/or failed governments

Fragile State Index, 2006

Fragile State Index, 2022



Source: Fragile State Index, The Fund for Peace

Will this facilitate global drug trafficking?

- **Failed states provide effectively open borders, willing accomplices and corrupt officials**
 - Guinea-Bissau exemplifies this vulnerability
- **However the supply of countries with these characteristics is hardly modest**
 - For example, Iran, Pakistan serve as easy portals for Afghanistan heroin
- **The collapse of countries such as Lebanon and Yemen make a small difference**
- **Instability poses risks to traffickers**
 - “However, as conflict dynamics in southern Libya and banditry in northern Niger have made security arrangements less predictable, overland cocaine flows through Libya have dropped. Alternative routing involves use of coastal shipments from Latin America either to West Africa and onward via sea to North Africa and to Europe, or directly from Latin America to North Africa and onward.” (Mangan, 2020)
- **But drug trafficking serves as financial source for terrorism**

Final Comments

Drug trafficking is resilient

- Enforcement can affect optimal structures and perhaps routes but only modestly affect flows

Questions remain about routes and methods

- Too little is known about how traffickers choose routes and methods for confident predictions about the effects of the increasing instability of many countries

New money laundering options makes enforcement harder

- The spread of new, more efficient and harder-to-penetrate methods of laundering money may complicate the task of capturing high level traffickers