Dark Banking? Banks and Illicit Deposit Flows
Evidence from the Mexican Drug Trade

David Aldama-Navarrete
Federal Reserve Bank of Richmond
david.aldamanavarrete@rich.frb.org

Abstract
Do banks enable organized crime? Does bank regulation effectively insulate financial intermediation from criminal activity? I address these questions using evidence from the drug trade in Mexico, finding that local drug cartel activity causes an increase in bank deposits. Accordingly, branch networks grew in afflicted areas; thus growth is not driven by increased lending opportunities. After the election of a “law-and-order” government, liquidity flows into branches of U.S. banks along the border. I interpret this as evidence that “finance follows crime” in weak institutional environments, and that, absent transitional policy coordination, regulatory arbitrage via cross-border liquidity flows undermines banking regulation.

Introduction
Do banks enable the transmission of illegal liquidity? Does regulation succeed in insulating financial intermediation from organized crime? We lack rigorous answers to these questions, which are important from the point of view of policy. In this paper, I shed light on these questions using the illegal drug trade in Mexico as an empirical laboratory. I find that drug cartel entry into Mexican municipalities causes a steep increase in bank deposits held locally, and bank branch networks grow in areas with organized crime presence. However, lending drops in these localities, implying liquidity windfalls were not used to expand local credit supply. After the 2006 election of a Federal administration in Mexico that cracked down on organized crime, I find significant liquidity windfalls among branches of U.S. banks located along the Mexican border: this is consistent with a marginal substitution in the destination of illicit deposits.

Data
Data on Mexican banks comes from CNBV, a regulatory agency. I merge this data with data obtained from Coscia & Rios (2012), who construct a novel database on areas of drug-cartel activity in Mexico for 1990-2010, using a web crawler to query Google News, searching for the co-occurrence of words with the words “drug,” “cartel,” and “Mexico.” Data on U.S. bank deposits, as well as geolocation data for bank branches, comes from Summary of Deposits reports of the Federal Reserve Bank of Richmond, the FDIC, and the OCC. Data on drug seizures is from U.S. Customs and Border Protection. Data on drug prices is retrieved from Coscia & Rios (2012), who construct a novel database on areas of drug-cartel activity in Mexico that cracked down on organized crime, I find significant liquidity windfalls among branches of U.S. banks located along the Mexican border: this is consistent with a marginal substitution in the destination of illicit deposits.

Empirical Strategy
Several challenges complicate testing the effects of organized crime on local banking outcomes. First, both affected and unaffected regions are exposed to common shocks. Further, cartel presence might be endogenous to local characteristics. Lastly, treatment periods will be location-specific. To deal with these issues, I pursue a generalized differences-in-differences (DID) empirical strategy in the first part of this paper. Likewise, testing the effect of policy aimed against illicit financial activity is not straightforward. Regulation is not randomly assigned, but originates as a response to extant social phenomena. To get around this problem, in the second part of this paper I run a series of canonical differences-in-differences tests to determine both the impact that a shift in the Mexican regulatory regime had on U.S. banking outcomes, and the endogenous response of banks to this shock.

Results
I first present results for a set of panel regressions with the following specification:

\[ \ln(Deposits_{it}) = \alpha_i + \gamma_1 T + \beta Treated_{it} + \epsilon_{it} \]  

(1)

In equation (1), \( \alpha_i \) is a vector with entries \( \alpha_{Deposit} \), number of credit-card contracts active in municipality \( i \) in year \( t \), \( Deposits \), total deposits for a given municipality-year, and \( Branches \), the number of bank branches active in this municipality. The model is saturated with municipality and year fixed effects. \( Treated_{it} \) is a binary variable which “turns on” if there are cartel active in municipality \( i \) at time \( t \). Cartel presence is found to have an impact of around 29% on deposits, 12% on deposits from U.S. banks located along the Mexican border: this is consistent with a marginal substitution in the destination of illicit deposits.

Conclusion
Do banks enable organized crime? Does bank regulation effectively insulate financial intermediation from criminal activity? I address these questions using evidence from the drug trade in Mexico, finding that local drug cartel activity causes an increase in bank deposits. Accordingly, branch networks grew in afflicted areas; thus growth is not driven by increased lending opportunities. After the election of a “law-and-order” government, liquidity flows into branches of U.S. banks along the border. I interpret this as evidence that “finance follows crime” in weak institutional environments, and that, absent transitional policy coordination, regulatory arbitrage via cross-border liquidity flows undermines banking regulation.

References