

# The Politics of Related Lending

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## Abstract

We analyze the profitability of government-owned banks' lending to their owners. We find evidence that such related lending is used to transfer bank profits to the governments, but only in localities where the incumbent politicians face significant competition for reelection. In localities where the incumbent party has a high probability of reelection there is no such evidence. This result establishes a causal link behind extant evidence that banks' lending to controlling parties (owners and directors) can result in "looting" of the banks. We show that such looting occurs when controlling parties are at risk of losing control.

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JEL Classifications: G20, G38

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# 1 Introduction

Banks often lend money to related parties such as shareholders and directors. This related lending has the potential to ameliorate inefficiencies (because unrelated banks know less about the borrowers), but it may also be used to divert resources from other investors and depositors (or from taxpayers who insure deposits). That is, related parties may take advantage of their influence to “loot” their banks through related lending.

Two important earlier works have provided evidence of looting in related lending. Laeven (2001) examines bank lending policies in Russia in the early 1990s. La Porta, Lopez-de-Silanes, and Zamarripa (2003) examine bank lending policies in Mexico in the mid-1990s. Both of these papers focus on loans to nonfinancial firms where either the firms are bank shareholders, or there exist bank shareholders who also hold shares in the nonfinancial firms. Both papers present evidence that related lending results in looting. This looting can take the form of lower interest rates and/or larger, but lower quality, loans.

We contribute to the literature on related lending by looking at such lending in a different context. As in the above studies we focus on lending that may benefit a controlling stakeholder of a bank. But, we look at banks that are owned by municipal governments and that make loans to these governments. The controlling stakeholders are public officeholders (town mayors) who also serve as bank directors.<sup>1</sup>

In order to understand the relevance of this study it is important to first consider the motivations for related lending by a government-owned bank, and why such lending matters. Suppose that a municipality borrows from its own bank at terms that are not beneficial to the bank, for example at interest rates that are below what the bank could earn from lending the money elsewhere. Such a transaction appears to simply move money from one publicly owned “pocket” to another, i.e., from a publicly owned bank’s equity capital account to the government coffers. So, why do we care? We care because, from a political perspective and a social

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<sup>1</sup>In Austria party control is more relevant than individual control, and so in our analysis we focus on political parties. For expositional purposes we refer to the mayor who is the main party representative in the municipality.

welfare perspective, such a transaction may be far from neutral. By “looting” the government-owned bank an incumbent politician can relax the government’s budget constraint and improve his reelection prospects. If the loan arrangements are non-transparent, then the politician can essentially use the citizens’ own money to give the impression of good public governance.

While such transactions can provide short-run benefits for incumbents, they may be associated with longer-run costs. For example, such profit transfers can compromise a municipality’s future ability to rely on the bank in the case of unforeseen shortfalls. There may also be a “crowding-out effect”: if a bank’s related lending erodes the bank’s capital, then this capital erosion can curtail the bank’s lending to the local private sector. Such crowding-out can impair the local tax base. But, whether or not an incumbent politician internalizes these longer-run costs may depend on the politician’s reelection probability. If, for example, the mayor belongs to a political party that has consistently dominated local politics, then the mayor will expect his party to stay in power long enough to shoulder both the benefits and the costs of looting the bank through related lending.<sup>2</sup> In contrast, a mayor whose party does not dominate local politics is apt to focus on the short-run benefits of looting, knowing there is a significant probability that the longer-run costs will be borne by a competing political party.

We thus hypothesize that transfers of government-owned banks’ profits through related lending (“looting”) are more likely to occur when politicians are less secure in their reelection prospects. Stated in more general terms, we argue that the incidence of profit transfers through related lending should be positively related to the likelihood that a controlling stakeholder will lose control. We test our hypothesis using data about unlisted municipally-owned Austrian banks, and we find evidence in support of the hypothesis.

We are able to test the hypothesis because of several unique features of our data and our analysis. First, we focus on the persistence of political competition, rather than on particular elections which may have been influenced by related lending. We use prior election data across a number of years to construct measures of

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<sup>2</sup>Even if an individual politician does not wish to be reelected, the politician is a member of a party that is long-lived.

the competitiveness of the local political environment for each municipality. These political competition measures provide us with exogenous proxies for the probability that a politician will lose control over the municipally-owned bank. In earlier studies of related lending the banks' related borrowers lost control because of defaults, either of the banks or of the borrowers themselves. Default risk is typically endogenous in that it can be affected by the terms of the related lending. By making use of an exogenous measure of the probability that an incumbent politician will lose control, we are able to document a causal effect that is at the heart of any discussion about related lending and "looting". Second, ours is the only study of related lending that we know of in which default of related borrowers is not a concern.<sup>3</sup> This feature of the data simplifies the interpretation of our empirical results because we can rule out the possibility that related lending is motivated by the municipal banks knowing more than other banks about the municipalities' creditworthiness.

We employ a research strategy that is based on a natural experiment that occurred when Austria joined the European Union (EU) in 1995. EU regulations imposed new transparency requirements on the municipalities' financing starting in this year. These transparency requirements made it much harder for politicians to loot municipally-owned banks since third parties (e.g., competing banks) could henceforth observe the terms of the banks' loans to their owners.<sup>4</sup> We conduct a difference-in-difference analysis of the profitability of banks' related lending: we measure the changes in this profitability when Austria joined the EU, and the differences in these changes between banks that are owned by politically competitive and politically noncompetitive municipalities. In a politically competitive municipality an incumbent politician faces a lower probability of reelection, i.e., a lower probability that his control over the bank will continue.<sup>5</sup> For banks owned by such

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<sup>3</sup>In theory the municipalities can default, but we know of no Austrian municipal defaults since the end of World War II (see <http://www.kommunalnet.at>). As far as we can tell these entities are treated by lenders as default risk-free.

<sup>4</sup>Besides increased transparency, Austria's EU accession also brought a strict set of rules against market distortions to the municipal loan market. A municipality's borrowing from its own bank at below-market terms would constitute a market distortion. While the EU has the mandate to enforce these regulations, the increased transparency enables competing banks to play a significant role in enforcement. As argued by Levine (2004) such enforcement by competitors can be more effective than enforcement by regulators.

<sup>5</sup>We consider three different proxies for the political competitiveness of a municipality. For

municipalities the profitability of related lending increased significantly after Austria joined the EU. For banks that are owned by politically noncompetitive municipalities, there was no significant difference in the profitability of municipal lending pre- and post-EU.<sup>6</sup>

These results are consistent with the theory that politicians who face political competition (are more likely to lose reelection) experience a larger net benefit from looting their municipally owned banks than do those who are more politically secure. In order to rule out other possible explanations for our results we run a number of robustness checks. For example, we estimate the relation between bank profitability and lending to *non*-municipal customers both pre-EU and post-EU. In contrast to the above results, we find that this relation became significantly more negative after Austria joined the EU. This latter result can be explained by the increase in competition that Austrian banks faced after EU membership, but it makes our result for municipal lending even more striking.<sup>7</sup>

Our study differs from some of the earlier literature in that we focus on bank profitability relative to related lending, rather than on the volume of related lending. The volume of related lending did increase after Austria joined the EU for most of the banks in our sample. This increase occurred because of changes in tax rules and transfers between the federal and local governments that affected all Austrian municipalities in 1995.<sup>8</sup> We model these changes and check for any evidence that political competition affected the volume of related lending. We find no such evidence. As a further robustness check we replicate our analysis while holding constant the banks' lending quantities to the municipalities (at the levels we observe prior to EU

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example, one measure defines a municipality to be noncompetitive if the same party won each of the six parliamentary elections prior to 1995, and by a margin of at least 10%. Any municipality that does not satisfy this condition is classified as politically competitive. As discussed in the data section we construct these measures so that they are exogenous to the municipal financing decisions.

<sup>6</sup>We can rule out that our measures of political competition are merely proxies for institutional differences between the municipalities since Austrian municipalities feature identical political institutions and election procedures.

<sup>7</sup>All types of loans should have been affected by increased competition, resulting in lower profits. It is thus striking that related loans in politically competitive municipalities became more profitable.

<sup>8</sup>When Austria joined the EU, the system of inter-government transfers was reformed in a way that led to municipalities bearing much of the cost of Austria's EU membership.

accession). We find that our results are robust.

To the best of our knowledge ours is the first study of related lending that directly examines the role of the probability that the controlling stakeholder relationship will continue.<sup>9</sup> Our results are most similar to those of La Porta, Lopez-de-Silanes, and Zamarripa (2003), Laeven (2001), and Bae, Kang, and Kim (2002), in that we provide evidence consistent with the looting view of related lending. Lamoreaux (1994) and Maurer and Haber (2007), in contrast, argue that banks can benefit from related lending, because such lending can mitigate informational asymmetries between banks and their borrowers.<sup>10</sup> Our work differs further from all of the above studies in that we study related lending in a country that has a high rule of law.<sup>11</sup> We thus extend the discussion of related lending beyond the scope of emerging markets with low governance standards.

Our work is also related to the literature on government ownership of banks. Government ownership of banks is quite common in many countries around the world. La Porta, Lopez-de-Silanes, and Shleifer (2002) analyze a sample of 92 countries and find that, on average, government-owned banks control about 42% of the assets of a country's 10 largest banks. These findings were based on data about the year 1995, but more recent contributions confirm that government ownership of banks remains high.<sup>12</sup> Ours is not the first study to show that politics can affect the lending decisions of government-owned banks. Dinç (2005) finds that government-owned banks increase their lending in election years relative to private banks. Sapienza (2004) finds that Italian government-owned banks charge interest rates that vary across regions and decrease in the regional power of the party in control of the bank. Khwaja and Mian (2005) show that politically connected firms in Pakistan receive more and riskier loans from government-owned banks. Cole (2009) shows that government-

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<sup>9</sup>La Porta, Lopez-de-Silanes, and Zamarripa (2003) report a positive correlation between increases in related lending and the number of nonrelated nonperforming loans in a bank. But, their study only covers a small number of banks and so they are not able to explore this relationship.

<sup>10</sup>Maurer and Haber (2007) also analyze data about Mexican banks, but from a much earlier period than in the La Porta, Lopez-de-Silanes, and Zamarripa (2003) study.

<sup>11</sup>La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) rank countries on a scale from 0 to 10, with 10 being the best score. Mexico has a score of 5.35 and Austria has a score of 10. Russia is not ranked in the study.

<sup>12</sup>See Micco, Panizza, and Yanez (2007) and Iannotta, Nocera, and Sironi (2007).



owned bank lending tracks the electoral cycle for a large sample of agricultural loans in India. Interestingly, he also finds that the largest increases in lending volume can be found in areas in which elections are particularly close.

The paper is organized as follows. In the next section, we present the theory and we describe the natural experiment that is at the core of our empirical analysis. In Section 3 we describe the data and provide some summary statistics. In Section 4 we present the main empirical analysis. Section 5 provides some concluding remarks.

## 2 The Theory and Research Strategy

### 2.1 The Theory

When municipalities borrow from the banks that they own, the owners of the bank and the borrowers are the same – the municipal citizens. The citizens are not, however, the decision makers who are directly in charge of the loan decisions. The citizens choose a municipal manager, the mayor, to act as their agent. The mayor makes the borrowing decisions for the municipality, and also sits on the board of directors for the municipally owned bank. The resulting agency problem is similar to a standard corporate governance problem. The mayor is mandated to act in the interests of the citizens, but the citizens cannot observe everything that the mayor does, and the mayor may have his own agenda. In addition, because the citizens are numerous, like the shareholders in a widely held company, the potential payoff to an individual citizen for monitoring is small.

We focus on agency conflicts arising from a politician’s desire to be reelected.<sup>13</sup> We assume that the politician,  $P$ , obtains a benefit  $B$  each time that he is reelected.  $P$  can affect his probability of being reelected in each period by exerting effort and/or by transferring profits from the bank to the municipal coffers (looting the bank) for public spending. These actions are not directly observed by voters; the looting may simply take the form of a loan at a below-market interest rate. Looting thus has the effect of giving the appearance that the town has been well run during that period, and so may improve  $P$ ’s reelection prospects. If  $P$  chooses not to loot

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<sup>13</sup>Even if an individual politician is not interested in reelection, the politician is a member of a political party that would like to remain in power.

the bank, then the bank's profits are added to its equity, essentially constituting a "rainy day fund" for the town. We assume that in any period there is a probability  $\gamma$  ( $0 < \gamma < 1$ ) that the town is hit by a random shock. The nature of this shock is such that if there is no rainy day fund (because of previous looting), then the voters will suffer, either in the form of diminished town services or higher taxes. If this happens, then the incumbent is certain to lose reelection.

Our objective in this section is to understand the linkage between  $P$ 's reelection probability and  $P$ 's looting decision. We thus consider only the looting decision and we assume a two period model. If  $P$  does not loot the bank in a given period, then his reelection probability in that period is equal to the prior, denoted as  $p_0$  ( $0 < p_0 < 1$ ).  $P$  can increase his reelection probability in the current period by looting the bank.<sup>14</sup> Specifically we assume that the probability of reelection, if  $P$  loots and if the town does not experience a random shock is:  $p_0 + p_0 \cdot (1 - p_0)$ .<sup>15</sup> We assume a discount factor of one, so  $P$ 's expected payoff is the sum of the probability-weighted benefits over the two years. Looting is always optimal in the last (i.e., the second) year.<sup>16</sup> Thus, we only need to analyze the optimal strategy in the first year. If  $P$  does not loot in the first year, the expected payoff is:

$$\Pi_0 = B \cdot p_0 + B \cdot p_0^2 \cdot (2 - p_0).$$

If  $P$  loots the bank in the first period and the town is hit by a random shock in the second period, then  $P$  will lose reelection for certain in the second period. This event occurs with probability  $\gamma$ , and is distributed independently of the election outcome in the absence of such a shock.  $P$ 's expected payoff if he does loot in the first period is thus:

$$\Pi_1 = B \cdot p_0 \cdot (2 - p_0) + B \cdot p_0^2 \cdot (2 - p_0)^2 \cdot (1 - \gamma)$$

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<sup>14</sup>This idea is consistent with the theory of Drazen and Eslava (forthcoming) and the empirical evidence of Brender and Drazen (2008). The latter paper shows that in developed countries and established democracies election-year deficits reduce the probability that a leader is reelected. Bank looting is a means through which  $P$  can use the bank profits to make the deficit look low.

<sup>15</sup>This function is strictly increasing and concave in  $p_0$ . It has the characteristic that the greatest benefit to looting,  $p_0 \cdot (1 - p_0)$ , is obtained at the most competitive prior ( $p_0 = 1/2$ ).

<sup>16</sup> In any model with a finite number of periods,  $P$  will choose to loot in the final period. Our focus is on the relationship between  $p_0$  and looting in the current period. The qualitative nature of this relationship is driven by the likelihood of a random shock in the future ( $\gamma$ ), not by the certainty of looting in the future.

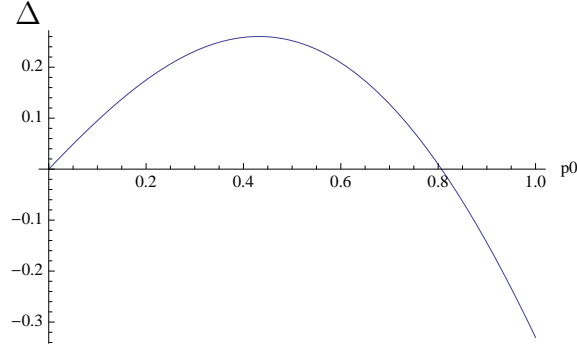


Figure 1: The relative benefit to looting ( $\Delta$ ) versus the prior reelection probability ( $p_0$ ), for  $\gamma = .33$

We can define  $P$ 's relative net expected benefit from looting as:

$$\Delta \equiv \frac{\Pi_1 - \Pi_0}{B} = p_0 \cdot (1 - p_0) \cdot (1 + p_0 \cdot (2 - p_0)) - \gamma \cdot p_0^2 \cdot (2 - p_0)^2 \quad (1)$$

The first term in equation (1) is the benefit to looting; the second term is the cost. The benefit is due to the increased reelection probability in the short run. The cost is due to the possibility that the money that has been transferred out of the bank today will be needed in the future.

Figure 1 illustrates the relation between  $P$ 's net benefit from looting the municipal bank and  $P$ 's prior reelection probability,  $p_0$ . Looting is beneficial to  $P$  for low and intermediate values of  $p_0$ ; for high values of  $p_0$  the cost outweighs the benefit, and so  $P$  will not want to loot the bank. Figure 1 shows this relation for the value  $\gamma = .33$ . The graph is qualitatively the same for all values of  $\gamma$  between zero and one, but as  $\gamma$  decreases the point at which  $\Delta$  crosses the x-axis moves to the right. As  $\gamma$  approaches zero, looting becomes profitable for all values of  $p_0$ . As  $\gamma$  approaches one, looting becomes profitable only for very small values of  $p_0$ .

Our model is similar to the models of Laeven (2001) and La Porta, Lopez-de-Silanes, and Zamarripa (2003) in that we assume there is a controlling stakeholder of the bank who can compel the bank manager to approve a loan that is suboptimal for the bank. However, in those models the controlling stakeholder benefits through the possibility of transferring wealth from other stakeholders in the case of default. In our model there is no risk of default, either of the controlling stakeholder (munic-

ipality) or the bank.<sup>17</sup> The benefit/cost tradeoff in our model is between a certain increase in the short-run reelection probability versus a possible large decrease in the long-run reelection probability. The prediction of our model is that a politician with a lower prior reelection probability faces a larger benefit and a smaller cost to looting, and so is more likely to loot his municipally-owned bank.

The predictions of our model are consistent with a recent piece of stylized evidence. According to a news story presented on Austrian national television on September 17, 2010, the European Commission has criticized the Austrian Hypo Alpe Adria (Hypo) bank for lending to some Austrian municipalities at below-market terms.<sup>18</sup> The municipalities are located in the Austrian state of Carinthia, and this state was until recently the owner of Hypo.<sup>19</sup> The story is consistent with our model in that the government of Carinthia was for the last 10 years run by a party that never had an absolute majority of seats in the state assembly and that had to compete hard to stay in power (i.e., to be re-elected).

## 2.2 The Natural Experiment

Profitability may vary across our banks for reasons that have nothing to do with related lending. Studies such as ours are often plagued by endogeneity problems in that it is impossible to ascertain what the banks' profitability levels would have been in any given year if looting had not been possible. We avoid this endogeneity problem by making use of a "natural experiment". A key requirement of a natural experiment is an event, the occurrence of which was independent of the variables of interest, and that caused exogenous changes in the variables of interest. By examining these changes we can analyze the relation between profitability and related lending, while avoiding the problem of endogeneity. As described by Meyer (1995), the relevant

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<sup>17</sup>This assumption is consistent with our data set. As discussed in the Introduction, we know of no Austrian municipal defaults since the end of World War II. We also know of no public bail-out or declaration of bankruptcy by an Austrian municipal savings bank since WWII.

<sup>18</sup>A (German) summary of the news story is available on the website for the Carinthian channel of Austria's national TV station, under <http://kaernten.orf.at/stories/470364/>. Hypo Alpe Adria is not included in the data set that we use in our empirical analysis because it is a universal bank and so is not supervised by the supervisory agency from which we got our data. This agency only supervises savings banks.

<sup>19</sup>Austria is divided into nine states. Carinthia is the southernmost state. The Carinthian government had control of the bank until it was nationalized in a bailout at the end of 2009.

exogenous event in economic studies is often a change in regulations.

Austria joined the European Union (EU) on January 1, 1995. As of this date Austrian municipalities were required to start obeying EU Directive 92/50EEC concerning public procurement. This directive specifies explicit rules for the public procurement of a range of services, including banking and investment services. The municipalities had to start following “open procedures [...] whereby all interested service providers may submit a tender” (Article I(d)), invite sufficiently many bidders to “ensure genuine competition” (Article 13), and base the award of contracts on “the lowest price only” (Article 36). The directives also increased the transparency of municipal borrowing. Upon request, the municipalities have to report to competing bidders and the European Commission “the name of the successful tenderer and the reason why this tenderer was selected” (Article 12). These rules apply whenever the municipalities borrow more than about 1.5 million Euros. Prior to joining the EU Austrian municipalities were not required to follow such transparent procedures.

It is possible that the EU rule, because it requires municipalities to solicit a number of bids and to accept the best bid, led to a decrease in the profitability of municipal banks’ lending to their municipalities. However, by stipulating an increase in transparency and inviting competition into the market for government financing, the rules would have also made it harder for municipalities to borrow from their own banks at below-market interest rates. Competing banks’ bids would hence serve as a benchmark to which the bids of municipally-owned banks could be compared. Moreover, the rules enabled competing banks, bank supervisors and the European Commission to obtain requisite information for detecting municipally-owned banks’ government-financing at off-market rates.

Our research strategy follows from the idea that EU regulations discouraged politicians from drawing on municipally-owned banks to obtain financing at below-market terms. If a municipality’s government was “looting” its bank in this way before Austria joined the EU, then we expect that the profitability of the bank’s municipal lending would have increased after Austria’s EU accession. We thus look at the change in the profitability of the banks’ related lending around the time when

Austria joined the EU.<sup>20</sup> We then analyze the difference in this change between banks that are owned by municipalities with a high level of political competition and those owned by municipalities with a low level of political competition.

### 3 Data and Descriptive Statistics

#### 3.1 Financial data about the banks and municipalities

Our empirical analysis is based on bank-level data about municipally-owned savings banks spanning the decade 1990-1999 (i.e., symmetric around the event date of the natural experiment in January 1995). To be included in our sample a bank must fulfill the following criteria: (i) the bank was active, as an independent bank, for at least 3 years before and after Austria’s EU accession, and (ii) the bank was owned by a municipality during the sample period. We were able to collect data for a sample of 53 banks that satisfy these criteria.

We obtained most of our bank-level data from the “Sparkassen-Pruefungsverband”. This institution is under the direct supervision of the Federal Ministry of Finance, and is charged with the financial supervision of savings banks. We obtained additional data from the Austrian National Bank (OeNB). This data was used to validate and cross-check our original data from the “Sparkassen-Pruefungsverband”. The data include the banks’ annual balance sheets and profit and loss accounts, as well as information about the compositions of the banks’ loan portfolios. The latter information, which is typically not included in balance sheets, enables us to determine the volume of banks’ lending to municipalities. Data on the terms of individual loans is not obtainable, but our focus in this study is a bit more general than loan terms. We are interested in the overall profitability of municipal lending, where profitability captures not only the effect of loan terms, but also the opportunity costs of engaging in related lending.<sup>21</sup> We collected financial information about

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<sup>20</sup>Both the event (joining the EU) and the rule change are exogenous to the variables of interest. Austria’s decision to join the EU was based on a popular vote that was taken in June 1994. It is very unlikely that the rule change affecting the municipal banks was a determining factor in the vote. It was also not at all clear ex-ante whether the vote would be in favor of joining, so the municipalities could not anticipate the rule changes.

<sup>21</sup>Our data set covers mostly small banks that do not have easy access to capital markets, so opportunity costs may be significant. Since the banks do not have publicly traded equity, we use

the municipalities from Statistik Austria.<sup>22</sup> This data includes the amount of debt of each municipality per capita, the regional Gross Domestic Product per capita and growth of the regional GDP.<sup>23</sup>

For each bank we have between 3 and 5 observations pre-EU (1990 to 1994) and between 3 and 5 observations post-EU (1995 to 1999). For each of the 53 banks we calculated the median value for each variable of interest in the pre-EU period and in the post-EU period.<sup>24</sup> Table 1 presents descriptive statistics for these values. *RoA* denotes the banks' return on assets. Total assets, *TA*, are reported in Euros in order to make the information more accessible to readers.<sup>25</sup> We divide the banks' loan portfolios into loans to municipalities and all other loans. *LM* is the ratio of municipal loans to total assets. *LnoM* is the ratio of the remaining loan portfolio to total assets. These ratios do not sum up to one because the total assets include non-loan assets, such as investments in traded securities.

The banks in our sample were generally profitable and had total assets ranging from about 32 million Euros to about 4.45 billion Euros. The mean size of the banks is somewhat larger in the post-EU period, but there is no significant difference in the mean profitability of the banks in the two periods. The fraction of the banks' assets invested in loans to municipalities (*LM*) did increase significantly after Austria joined the EU, from 3.7% during the pre-EU period to 17.3% in the post-EU period. In the pre-EU period four of the banks in our sample had no loans to municipalities, and the largest value for *LM* was 14.8%. In the post-EU period only three banks had no loans to municipalities and the largest value for *LM* was 30.6%. We believe that this increase is explained largely by factors that are exogenous to our study. When Austria joined the EU, the system of inter-governmental transfers was reformed in a way that caused municipalities to bear much of the cost of Austria's EU membership.

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accounting data to measure profitability.

<sup>22</sup><http://www.statistik.at/web>

<sup>23</sup>GDP data is available only on a regional level that is somewhat coarser than the municipal level. While our main data set consists of 53 banks and municipalities, the regional GDP data is available for 24 regions.

<sup>24</sup>Following Bertrand, Duflo, and Mullainathan (2004) we don't use annual observations but pre and post-EU median values in our empirical analysis.

<sup>25</sup>The data is given in Austrian Schillings (ATS). When producing the numbers in Table 1 we used the exchange rate: 1 Euro = 13.76 ATS.

Changes in tax laws and in transfers between the federal and local governments occurred at this time and affected all Austrian municipalities. The ratio of non-municipal loans to total assets,  $LnoM$ , did not change significantly after Austria joined the EU, so the increase in  $LM$  is accompanied by a relative decrease in nonloan assets. Consistent with the post-EU increase in  $LM$  we also see that the municipal debt per capita,  $DC$ , increased after Austria joined the EU, although not in the same magnitude as the increase in  $LM$ . The GDP per capita did increase from the pre-EU period to the post-EU period, as we would expect.<sup>26</sup> We explore these changes further in a later section where we analyze the increases in  $LM$  to determine if there are cross-sectional differences that are relevant for our study.

### 3.2 Data about political competition

To construct measures of political competition we use municipal-level data about the outcomes of elections for representatives in the Austrian national assembly. From the Statistik Austria website we have obtained the number of votes that voters in each municipality cast in favor of each major party in the national elections that took place in 1975, 1979, 1983, 1986, 1990 and 1994. This data enables us to determine if a municipality has strongly and persistently favored one party over all others.<sup>27</sup>

We use these data to construct three indicators of political competition. Each bank in our sample is assigned a value of either zero or one for each indicator, where the value one indicates that the bank is owned by a municipality with a persistent politically competitive environment.<sup>28</sup> For the first measure a municipality is defined as noncompetitive ( $Pol1 = 0$ ) if the same party won each of the six elections, and by a margin of at least 10%; otherwise  $Pol1 = 1$ . According to this measure 28 of

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<sup>26</sup>The GDP per capita in our municipalities is somewhat lower than for Austria on average. For example, the per capita GDP for Austria in 1997 was 23,000 Euros. The reason for this difference is that our data set includes banks in a number of rural regions and it does not include any banks in the largest Austrian cities. Vienna, Graz, Linz and Salzburg are not represented in our sample.

<sup>27</sup>There does not exist any central storage of data about elections for Austrian municipal offices. Even if such data could be obtained, it would not be useful for constructing *exogenous* measures of political competition. We use only pre-1995 data to further ensure that our measures are exogenous.

<sup>28</sup>We use the term persistent to stress that our analysis does not focus on any particular election, but rather on the effect of a persistent level of political competition that gives elected officials incentives to abstain from tax increases and keep up government services, throughout their tenures.



the municipalities are identified as politically competitive and 25 as noncompetitive.

For the second measure a municipality is defined as noncompetitive ( $Pol2 = 0$ ) if one party obtained, on average across the six elections, at least 50% of the votes; otherwise  $Pol2 = 1$ .<sup>29</sup> According to our second measure 27 of the municipalities are identified as politically competitive and 26 as noncompetitive.

The third indicator variable is based on the “victory margin” of the locally leading party. The locally leading party is the party that won the largest number of elections. In the case of a tie, the locally leading party is the party that on average won with the largest fraction. The victory margin of the leading party is the average winning margin for that party across the six elections.<sup>30</sup> We then calculate the median victory margin across the 53 municipalities. As indicated in Table 2, this median value is 13.4%. Municipalities with a victory margin below the median value are identified as “politically competitive” and are assigned a value of  $Pol3 = 1$ . Municipalities with a victory margin at or above the median are noncompetitive and are assigned a value of  $Pol3 = 0$ . According to this indicator, 26 of the municipalities are identified as politically competitive and 27 as noncompetitive. Our three measures of political competition result in similar classifications of the municipalities.<sup>31</sup>

In Table 3 we present summary statistics that enable us to examine similarities and differences across different subsets of our sample. In this table we segment the data not only between pre- and post-EU observations, but also according to the  $Pol3$  variable. Columns (1) and (2) of Table 3 repeat the mean values that are presented in Table 1.<sup>32</sup> Column (3) shows that the means of three of our variables exhibited significant change from the pre-EU to the post-EU period: GDP per capita, GDP growth, and the fraction of municipal loans on banks’ balance sheets ( $LM$ ). GDP

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<sup>29</sup>There are more than two parties, so a party may win with less than 50% of the vote.

<sup>30</sup>The winning margin is the percent of votes won by the locally leading party minus the percent of votes won by the second place party. The margin is positive for any election which the leading party won and negative if the party lost.

<sup>31</sup>Every municipality that is classified to be politically-competitive according to measure  $Pol3$  is also classified as being competitive according to the other two measures. Similarly, the politically-competitive municipalities according to  $Pol2$  are also politically-competitive according to  $Pol1$ .

<sup>32</sup>The exception is that in Table 3 we include Log of total assets, instead of Total assets. We do this because the Log of total assets is what we use in our regression analysis.

per capita and  $LM$  were significantly larger in the post-EU period; GDP growth was significantly smaller. Columns (4) to (6) report the equivalent data for the subset of banks owned by politically noncompetitive municipalities, i.e., the 27 banks for which  $Pol3 = 0$ . Columns (7) to (9) report the equivalent data for the subset of banks owned by politically competitive municipalities, i.e., the 26 banks for which  $Pol3 = 1$ .<sup>33</sup> Columns (6) and (9) report essentially the same results as found in column (3). Within each of the two subsets of banks, the same three variables experience the same (qualitative) changes.

In the last three columns of Table 3 we report t-statistics on the differences between the banks owned by politically competitive and noncompetitive municipalities. In column (10) we report the t-statistics for the differences in the pre-EU means between the politically competitive and noncompetitive subsets. In column (11) we do the same for post-EU means. Both in the pre-EU period and in the post-EU period the only highly significant difference between these two sets of banks is in the GDP per capita of the regions in which they are based. In column (12) we report t-statistics for differences in these differences: columns [(5)-(4)] - [(8)-(7)]. Our objective is to determine if the differences reported in columns (6) and (9) are significantly different between the two sets of banks. Again, we find that the only highly significant difference is in GDP per capita. Banks that are owned by politically competitive municipalities are located in regions that had higher GDP per capita both pre- and post-EU, and that exhibited greater increases in GDP per capita after Austria joined the EU. We explore this relationship in depth in a later section of the paper. Another important result presented in column (12) is the lack of significance for the difference-in-difference for  $LM$ . Lending to municipalities increased significantly from the pre- to post-EU period for both sets of banks, and there is no significant difference in this increase between banks owned by politically competitive and noncompetitive municipalities.

Table 4 presents correlations between variables that are summarized in Tables 1 and 2. Bank size is negatively correlated with  $LM$ , as is post-EU GDP growth. Bank size is positively correlated with GDP per capita and with municipal debt

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<sup>33</sup>Summary statistics are qualitatively identical if we split the sample by  $Pol1$  or  $Pol2$ .

per capita.  $LM$  is not significantly correlated with the return on assets.  $LnoM$  is negatively correlated with the return on assets in the post-EU period. This may be due to increased competition after Austria joined the EU. Consistent with the results reported in Table 3, Victory Margin is negatively correlated with GDP per capita.<sup>34</sup>

## 4 The Empirical Analysis

We conduct our main empirical analysis in two parts. We begin by examining “first differences”: the difference in bank profitability relative to related lending before and after Austria joined the EU. This part of the analysis enables us to determine if related lending did become, on average, more profitable for the municipally-owned banks after EU accession. We then proceed to a “differences-in-differences” analysis. In this second step of the analysis we examine the difference in the first differences (pre- vs. post-EU) between banks that are owned by politically competitive municipalities and those owned by politically noncompetitive municipalities. After presenting our main results we then extend the analysis in two directions. We examine changes in the volume of related lending, and we explore the relation between politics, GDP per capita and related lending. In both of these extensions we present robustness checks on our main results.

### 4.1 Related Lending and Bank Profitability: Pre- versus Post-EU Correlations

As discussed, EU transparency rules made it difficult for municipalities to borrow from their own banks at non-market terms. If municipalities were borrowing from their banks at below-market terms (looting the banks) prior to EU accession, then the bank profitability relative to such related lending should improve after EU accession. We check for evidence of such improvement by running the following regression:

$$RoA_{i,t} = a_{LM}LM_{i,t} + a_E E_t + a_{LM}^E LM_{i,t}E_t + a_X X_{i,t} + u_i + \epsilon_{i,t} \quad (2)$$

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<sup>34</sup>A higher value for Victory Margin means that the municipality is politically noncompetitive.

where  $RoA_{i,t}$  denotes the return-on-assets of bank  $i$  in period  $t$ ,  $LM_{i,t}$  is the volume of bank  $i$ 's municipal lending divided by the bank's total assets,  $E_t$  is a dummy variable that equals zero (one) during the period before (after) Austria joined the EU,  $X_{i,t}$  is a vector of control variables,  $u_i$  are bank-specific fixed effects, and  $\epsilon_{i,t}$  is an error term. This initial regression does not include our political variables. The coefficient  $a_{LM}^E$ , measures the difference in the correlation between bank profitability and municipal lending before and after Austria's EU accession. This coefficient should be positive if municipalities were using related lending to loot their banks in the pre-EU period, and not in the post-EU period.

The estimates of regression (2) are presented in column  $D_1$  of Table 5. Rather than working with annual observations, we run the regression using pre- and post-EU median values of all variables.<sup>35</sup> There are 53 banks and two observations for each bank, a pre-EU median and a post-EU median. The control variables in the regressions are the log of total assets in Austrian Schillings ( $\log(TA)$ ),<sup>36</sup> the ratio of non-municipal loans to bank assets ( $LnoM$ ), the municipal debt per capita ( $DC$ ), the regional GDP per capita ( $GDPC$ ), and the regional GDP growth ( $GDPCGr$ ).

The coefficient  $a_{LM}$  is significantly negative and the coefficient  $a_{LM}^E$  is significantly positive. That is, the relative profitability of related lending increased after Austria joined the EU. These results are consistent with the idea that municipalities used related lending to transfer profits out of their banks prior to Austria's membership, and that such transfers ended, or significantly decreased, after Austria joined the EU.

In Column  $D_2$  of Table 5 we confirm that the banks' municipal loans are indeed different from other loans. We re-estimate regression equation (2), but with a slightly different specification: we substitute the interacted variable  $LnoM_{i,t}E_t$  for  $LM_{i,t}E_t$ . We see that the coefficient on  $LnoM_{i,t}E_t$  is significantly negative. That is, non-municipal lending became *less* profitable after Austria joined the EU. This result is consistent with the increase in bank competition that occurred in Austria

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<sup>35</sup>Our estimation method is based on a suggestion of Bertrand, Duflo, and Mullainathan (2004) for difference analyses in the presence of serially correlated errors. We use medians, instead of means, in order to obtain estimates that are robust with respect to outliers.

<sup>36</sup>The data are given in Austrian Schillings (ATS). When producing the numbers in Table 1 we used the exchange rate: 1 Euro = 13.76 ATS.

after the country joined the EU. In comparison, it is quite striking that  $a_{LM}^E$ , the coefficient on  $LM_{i,t}E_t$ , in column  $D_1$ , is significantly positive. If increased competition were the dominant effect of Austria's EU membership, then we should observe reduced profitability for all types of lending activity, resulting in a negative coefficient for  $LM_{i,t}E_t$ . One explanation for the observed positive coefficient is that the pre-EU profitability of related lending was below competitive levels. That is, municipalities were looting their banks prior to EU membership. This is, however, not the only possible explanation. As discussed above, lending to municipalities increased after Austria joined the EU. Thus an increase in profitability could also be due to realized economies of scale. Up to this point we have only measured correlations and so cannot disentangle the different interpretations. The analysis in the following sections yields a more narrow interpretation of the results.

## 4.2 Politics and Related Lending: Causal Effects

We now examine the effect of politics on the first differences documented in the previous section. The motivation for the analysis in this section is the hypothesis put forth in Section 2.1 that politicians with lower probabilities of reelection are more likely to loot their banks. This hypothesis predicts that banks owned by municipalities with more competitive politics should have realized greater improvements in the profitability of their related lending than banks owned by municipalities with less political competition.

Our main objective in this section is to look for evidence of a causal effect (political competition) that may have induced municipalities to use related lending to transfer profits out of their banks. In order to be able to assign a causal interpretation to our results we form measures of political competition that we believe are exogenous with respect to related lending and bank profitability. To this end we focus on the persistence of political competition, rather than on any particular election, and we form measures of this persistence using data from elections that took place prior to 1995, as described in Section 3.2. Exogeneity of the political measures is, of course, only a necessary, and not a sufficient, condition for a causal

interpretation of our results. We explore other explanations in later sections.<sup>37</sup>

We use the political competition variables that are summarized in Table 2 to divide the municipal banks into two groups. Those municipalities with competitive political environments (low reelection probability) are assigned a value of  $Pol_i = 1$ ; those municipalities with less competitive political environments (high reelection probability) are assigned a value of  $Pol_i = 0$ . We then employ a difference-in-difference specification to determine the extent to which the results of the previous section can be explained by political competition. The following regression equation is identical to that in expression (2), except for the middle line:

$$\begin{aligned} RoA_{i,t} = & a_{LM}LM_{i,t} + a_E E_t + a_{LM}^E LM_{i,t} E_t \\ & + a_P Pol_i + a_P^E Pol_i E_t + a_{P,LM} Pol_i LM_{i,t} + a_{P,LM}^E Pol_i LM_{i,t} E_t \\ & + a_X X_{i,t} + u_i + \epsilon_{i,t}, \end{aligned} \quad (3)$$

The coefficient  $a_{P,LM}^E$  captures a difference-in-difference effect, i.e., the differential effect of EU membership on related lending for banks owned by politically competitive and politically noncompetitive municipalities. If our hypothesis of Section 2 is correct, then this coefficient should be positive.

The estimates for equation (3) are presented in Table 6. All of the regressions in this table are GLS regressions with bank-specific random effects.<sup>38</sup> As in Table 5, there are 53 banks and two observations for each bank, a pre-EU median and a post-EU median. The control variables are also the same as in Table 5. Table 6 presents three different estimates of equation (3), one with each of the political variables that are summarized in Table 2.

The results of estimating equation (3) are quite striking. The coefficient  $a_{P,LM}^E$  is significantly positive, as predicted, and the coefficient  $a_{LM}^E$  is now insignificant. The effect that we documented in the analysis of first differences of the previous section occurs only for those banks that are owned by politically competitive municipali-

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<sup>37</sup>For example, we check whether our results are driven by changes in  $LM$  around Austria's EU accession, and whether our measures of political competition can explain these changes.

<sup>38</sup>We present the results with random, instead of fixed, effects because the political variables do not vary over time and so their independent effects (coefficient  $a_P$ ) cannot be estimated in a fixed effects framework. Fixed effects estimates for the coefficient  $a_{P,LM}^E$  are qualitatively similar to the random effect estimates in Table 6.

ties. That is, we find evidence consistent with municipalities using related lending to transfer profits out of their banks *only* for municipalities in which there is a *competitive* political environment. For those municipalities in which the incumbent party faces a high reelection probability we find no such evidence. These results are consistent with the predictions that we developed in Section 2.1.

To gauge the economic importance of these results, consider a government-owned bank that has an average amount of lending to municipalities and that is located in a politically competitive municipality. Such a bank would have, on average across the sample period, municipal loans equal to about 10.5% of assets.<sup>39</sup> Compared to banks in politically non-competitive municipalities, this bank’s return on assets was lower by approximately 0.5% ( $0.105 \times 0.045$ ).<sup>40</sup> The event of Austria joining the EU increased this bank’s median return on assets in the 5 years post-EU by approximately 1% ( $0.173 \times 0.059$ ), an amount that more than offsets the unconditionally negative effect. Based on the mean bank size, as reported in Table 1, this translates to about 4.6 million Euros per bank in the post-EU period.<sup>41</sup>

Table 6 also shows that banks in politically competitive municipalities underperformed by 0.6% on average after Austria joined the EU. In order to examine the effect of politics alone, we estimated a specification similar to equation (3), but without any of the terms containing  $LM_{i,t}$ . We found that the political variables by themselves (i.e., not interacted with the volume of the banks’ related lending,  $LM$ ) have much weaker explanatory power for bank profitability.<sup>42</sup> That is, political competition seems to affect the profitability of these government-owned banks predominantly through their related lending.

As we did in Section 4.1, we again check that municipal loans are different from all other loans. To do this we perform a robustness check that is similar to that presented in Column  $D_2$  of Table 5. We re-estimate regression equation (3),

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<sup>39</sup>Table 1 shows that the mean level of lending to municipalities normalized by total assets is 3.7% (17.3%) pre-Eu (post-EU). The average of these is 10.5%. In Table 3 we saw that the level of municipal lending does not vary significantly with our political variables.

<sup>40</sup>The coefficient estimates used in this paragraph are taken from the third column of Table 6.

<sup>41</sup>As discussed in Section 3.1, these costs can take the form of lending at below market terms and/or opportunity costs if related lending squeezes out other lending opportunities.

<sup>42</sup>We don’t report these estimation results in the paper. They can be obtained directly from the authors.

but with the following change: for all of the interacted variables containing  $LM_{i,t}$  we substitute the equivalent interacted variable containing  $LnoM_{i,t}$  instead. These estimates are reported in Table 7. As in Column  $D_2$  of Table 5, we find that loans to municipalities are different from loans to other entities. Not only is the coefficient on  $LnoM_{i,t}E_t$  negative and significant in two of the three columns, but none of the coefficients for political variables are significant. It is only the volume of lending to municipalities (the related lending) that results in a pattern that is consistent with our hypothesis.

### 4.3 Volume of Municipal Lending

We have in the previous section documented a relation between reelection probabilities (political competition) and the profitability of related lending. We now check for any relation between political competition and the *volume* of related lending. We have already shown (in Table 3) that the volume of lending to municipalities increased significantly from the pre-EU to the post-EU period. This increase occurred for all but three banks in our sample. We have learned that this increase followed from changes in tax rules and transfers between the federal and local governments that affected all Austrian municipalities when Austria joined the EU. We also showed in Column (12) of Table 3 that there is no significant difference in the average increase between banks owned by politically competitive and noncompetitive municipalities. In order to be certain that the latter result is robust, we run the following regression:

$$LM_{i,t} = b_R ROA_{i,t} + b_E E_t + b_P Pol_i + b_P^E Pol_i E_t + b_X X_{i,t} + u_i + \epsilon_{i,t} \quad (4)$$

where all of the variables are as defined before, and the control variables  $X_{i,t}$  are the same as in the previous regressions.

The estimates for equation (4) are presented in Table 8. All of the regressions in this table are GLS regressions with bank-specific random effects. The three columns represent three different estimates of equation (4), one with each of the political variables that are summarized in Table 2. In each of these three columns we see that  $b_E$  is significantly positive. This result is consistent with Table 3 where we showed



a significant increase in  $LM$  post-EU. Most importantly, political competition does not explain the changes in the volume of related lending: neither  $b_P$  nor  $b_P^E$  is significantly different from zero in any of the columns of Table 8.

We next conduct a robustness check to make sure that our results regarding bank profitability do not depend on the post-EU increase in the volume of the banks' lending to their owners. We re-estimate our main regression, equation (3), but we hold constant the banks' lending to their owners at pre-EU levels. I.e., we estimate our regressions as if there was no change in the level of each bank's related lending. Table 9 summarizes the results for the first differences specification (column 1) and the differences-in-differences specification with different proxies for political competition (columns 2 to 4). Our prior results regarding bank profitability remain intact: municipal lending increased in profitability after Austria joined the EU, but only for banks that are owned by politically competitive municipalities. The coefficients of the triple interaction term (pre-EU  $LM$  x  $Pol$  x Post-EU) are similar to those of the corresponding triple interaction term in Table 6. This robustness check alleviates concerns that our prior estimates may have been biased due to possibly endogenous changes in the variable  $LM$ .

#### 4.4 GDP and Political Competition

Our above analysis documents that Austria's EU accession was associated with changes in the profitability of municipally-owned banks' lending to their owners, and that those changes were associated with political competition. In this section we explore the latter association further. As discussed in Section 2, Austria's EU accession resulted in both an increase in the transparency of the banks' lending to their owners, and a removal of entry barriers in banking markets. These two effects are related in that the increase in transparency was meant to ensure public procurement at competitive market prices, and such prices can only be observed in the presence of competition. Moreover, an increase in competition likely had direct effects on the profitability of the banks in our sample, and possibly even on the extent to which the banks could be "looted" by politicians. It is therefore important to check whether our results are robust to controlling for changes in the

profitability of the markets in which the banks in our sample operated.

For this robustness check we use regional economic output (GDP per capita) as a proxy for the profitability of a regional banking market. The statistics in Table 3 reveal that the more politically competitive municipalities within our sample are located in regions that experienced on average larger post-EU increases in per capita GDP. Given this correlation, we must ask whether the effects that we attribute to differences in political competition are instead due to differences in the effects of Austria’s EU accession on regional GDP per capita.

In order to directly compare GDP per capita and political competition we form an indicator variable for GDP per capita. *HiGDPC* is equal to one if a bank is located in a region with pre-EU per capita GDP that is above the median for our sample, and zero otherwise. Table 10 presents summary statistics on the joint distributions of *HiGDPC* and our three political variables.<sup>43</sup> It is clear that *HiGDPC* and our political competition variables are correlated, but not perfectly.

We begin the analysis of this section by attempting to reproduce our main results using *HiGDPC* instead of our political variables. That is, we reestimate equation (3), but we replace all occurrences of the political competition indicator variable with *HiGDPC*. The results, presented in the first column of Table 11, are quite similar to our main results that are presented in Table 6. Most importantly, the coefficient for the interacted term  $LM \times HiGDPC \times \text{Post-EU}$  is positive and significant. That is, we are able to replicate the results of Table 6 using GDP per capita instead of political competition as one of our main variables of interest. This result is not surprising given the high level of correlation between *HiGDPC* and our political variables. In order to determine which of these variables captures the more important relation for our analysis we next examine segmented samples of our data.

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<sup>43</sup>We form indicator variables mainly because the results in the difference-in-difference regressions are easier to interpret with indicator variables. Out of our 53 banks 25 have *HiGDPC* = 1 and 28 have *HiGDPC* = 0. The reason for the uneven split is that our GDP data is regional and there are multiple banks in some regions. There are 25 banks that are strictly above the median and 22 that are strictly below. We assign the 6 banks that are exactly at the median the value *HiGDPC* = 0. Of these 6, 5 are in politically noncompetitive municipalities and one is in a politically competitive municipality. We also conducted the analysis presented in this section with these 6 banks assigned the value *HiGDPC* = 1. The results were qualitatively identical.

In the second and third columns of Table 11 we repeat the analysis of the first column, but with our data set segmented according to the political competition variable *Pol3*. The coefficient for the interacted term  $LM \times HiGDPC \times \text{Post-EU}$  is positive, but not significant in either subset. Once we have controlled for political competition, GDP per capita has no explanatory power for our main results concerning the post-EU change in the profitability of municipal lending. It thus appears as if the results found in the first column of Table 11 occur only because of the correlation between GDP per capita and political competition. To check this we next present a similar segmented analysis, but in reverse.

The regression results presented in Table 12 are equivalent to those of Table 11, except that the *Pol3* variable is used in place of *HiGDPC* in the regressions, and in the second and third columns the sample is segmented according to *HiGDPC*.<sup>44</sup> The first column of Table 12 is thus identical to the last column of Table 6. We again focus on the triple interaction term:  $LM \times Pol \times \text{Post-EU}$ . In the second column, which presents the results for the subset of banks located in regions with above-the-median GDP per capita, the coefficient for this interacted term is positive and significant. That is, after controlling for GDP per capita, political competition does have significant explanatory power for our main results concerning the post-EU change in the profitability of municipal lending. The triple interacted term, however, is not significant for the sample of banks located in regions with low GDP per capita.

In summary, we find evidence that is consistent with a political explanation for municipalities transferring profits out of their banks when the banks engage in related lending to the municipalities. It seems, however, that the increased transparency of related lending around Austria's EU accession only curtailed the looting of banks located in regions with relatively high GDP per capita. Our evidence is consistent with the idea that such regions attracted entry of banks to compete with municipally-owned incumbent banks, and to thus establish benchmarks for the terms at which the latter banks could lend to their owners.<sup>45</sup>

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<sup>44</sup>We also performed the analysis of Tables 11 and 12 using the variables *Pol1* and *Pol2*, instead of *Pol3*. The results are qualitatively identical to what we present here.

<sup>45</sup>This interpretation is consistent with Levine (2004) and articles in the Austrian popular press;

## 5 Conclusion

This paper extends the current understanding of related lending. Most importantly, we document a link between “looting” through related lending and the probability that a related borrower’s position of control with respect to the bank will endure. Using a unique data set about municipally-owned banks we find evidence consistent with the “looting” explanation of related lending: that is, evidence that related lending has been used to transfer profits out of the banks. But, such evidence is present only for banks that are owned by municipalities in which there is a competitive political environment. For banks owned by politically noncompetitive municipalities there is no such evidence. These results are consistent with our hypothesis that incumbent politicians who are more likely to lose reelection are also more likely to use related lending to transfer profits from a government-owned bank to the government coffers. These transfers can be damaging in that they artificially (and temporarily) ease government budget constraints and enable politicians to squander public monies.

By documenting evidence of looting through related lending in a developed country with high legal standards, we extend the discussion of related lending beyond the scope of emerging markets with low governance standards. Our results suggest that in markets with a high rule of law mandating transparency for government banking transactions can be valuable. It is quite possible, however, that for this transparency to be truly effective, it is necessary also to have stakeholders with incentives to monitor, such as competing banks.

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for example, the looting example mentioned at the end of section 2.1. In the case of Hypo Group Alpe Adria, this article specifically mentions the mechanism of granting below market rate loans to the owning municipality. It also confirms that the Commission of the European Union actively enforces EU regulation. And, consistent with our discussion of the role of GDP per capita and competition, the Hypo Group Alpe Adria bank is located in a geographic area with relatively low economic wealth. This might explain why the looting behavior was still going on many years after Austria joined the EU.

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Table 1: **Summary statistics of financial variables.** For each of the 53 banks a median value was calculated for each variable of interest for the years from 1990 to 1994 (pre-EU) and a second median was calculated for the years from 1995 to 1999 (post-EU). This table reports summary statistics for these median values. Three stars next to the means in the bottom panel indicate differences between pre-EU and post-EU means that are significant at the 1% level.

<b>Before EU</b>					
Variable		Mean	Std. Dev.	Median	N
Return on assets	<i>RoA</i>	0.008	0.003	0.008	53
Total assets (Mil.Euros)	<i>TA</i>	343	666	164	53
Municipal loans/total assets	<i>LM</i>	0.037	0.033	0.033	53
Non Municipal loans/total assets	<i>LnoM</i>	0.728	0.067	0.726	53
Muni. Debt per Capita (Thou. Euros)	<i>DC</i>	1.104	0.913	0.898	53
GDP per Capita (Thou. Euros)	<i>GDPC</i>	15.159	3.913	14.000	53
GDP Growth	<i>GDPGr</i>	0.056	0.011	0.056	53

<b>After EU</b>					
Variable		Mean	Std. Dev.	Median	N
Return on assets	<i>RoA</i>	0.008	0.004	0.007	53
Total assets (Mil.Euros)	<i>TA</i>	456	836	213	53
Municipal loans/total assets	<i>LM</i>	0.173***	0.074	0.181	53
Non Municipal loans/total assets	<i>LnoM</i>	0.730	0.065	0.737	53
Muni. Debt per Capita (Thou. Euros)	<i>DC</i>	1.390	1.038	1.184	53
GDP per Capita (Thou. Euros)	<i>GDPC</i>	18.68***	4.858	16.800	53
GDP Growth	<i>GDPGr</i>	0.032***	0.007	0.032	53

Table 2: **Summary statistics of political variables.** All of the political variables (*Pol*) were created using data from six elections for local representatives to the national government. The six elections took place before 1995 (1975, 1979, 1983, 1986, 1990 and 1994). Victory Margin (*VM*) is the average across the six elections of the percent of votes won by the locally leading party (i.e., the party that won most of the 6 elections) minus the percent of votes won by the second place party (in individual years this victory margin can be negative). Competitive (*Pol1*) is equal to zero if the same party won each of the six elections, and by a margin of at least 10%; otherwise *Pol1* is equal to one. Non-Dominant winner (*Pol2*) is equal to zero if one party obtained, on average across the six elections, at least 50% of the votes; otherwise *Pol2* is equal to zero. *Pol3* is equal to zero if the Victory Margin (*VM*) is equal to or greater than the median value in our sample; otherwise *Pol3* is equal to one. A value of one (zero) for any political variable indicates a high (low) level of political competition.

Variable		Mean	Std. Dev.	Median	N
Victory Margin (%)	<i>VM</i>	18.3	14.6	13.4	53
		<b># equal to 1</b>		<b># equal to 0</b>	
Competitive	<i>Pol1</i>	28		25	53
Non-dominant winner	<i>Pol2</i>	27		26	53
Low-Absolute Difference	<i>Pol3</i>	26		27	53



Table 3: **Summary statistics of financial variables.** For each of the 53 banks a median value is calculated for each variable of interest for the years from 1990 to 1994 (pre-EU) and a second median is calculated for the years from 1995 to 1999 (post-EU). This table reports raw sample means of these median values across banks. There are 53 banks in the “All Municipalities” category. The classification into “Pol. Non-Comp. Muni.” (politically noncompetitive municipalities) and “Pol. Comp. Muni.” (politically competitive municipalities) is based on the *Pol3* variable, as described in Table 2. There are thus 27 banks in the noncompetitive category and 26 in the competitive category. Columns (3), (6) and (9) report t-statistics of the differences between the post-EU and the pre-EU values: columns (2) - (1), (5) - (4), and (8) - (7). Columns (10) and (11) report t-statistics of the differences between columns (4) and (7) and columns (5) and (8). Column (12) reports t-statistics of the differences in differences:  $((5)-(4)) - ((8)-(7))$ .

	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)		
	Pre-EU	Post-EU	Pre-EU	Post-EU	tstat	Pre-EU	Post-EU	Pre-EU	Post-EU	Pre-EU	Post-EU	Pre-EU	Post-EU	Pre-EU	Post-EU	Pre-EU	Post-EU	tstat	tstat	tstat	tstat	tstat	tstat	tstat	
Return on assets ( <i>RoA</i> )	0.0083	0.0076	0.0076	-1.04		0.0081	0.0078	-0.31		0.0085	0.0073	-1.12		0.0085	0.0073	-1.12		0.0085	0.0073	-1.12		0.0085	0.0073	-1.12	
Log of total assets ( <i>Log(TA)</i> )	21.490	21.823	21.823	1.60		21.223	21.560	1.64		21.768	22.096	0.93		21.768	22.096	0.93		21.768	22.096	0.93		21.768	22.096	0.93	
Municipal loans/total assets ( <i>LM</i> )	0.0372	0.1734	0.1734	12.2		0.0444	0.1713	7.49		0.0297	0.1757	10.0		0.0297	0.1757	10.0		0.0297	0.1757	10.0		0.0297	0.1757	10.0	
Nonmuni loans/tot assets ( <i>LnoM</i> )	0.7277	0.7298	0.7298	0.16		0.7209	0.7373	1.06		0.7349	0.7220	-0.61		0.7349	0.7220	-0.61		0.7349	0.7220	-0.61		0.7349	0.7220	-0.61	
Muni debt per capita ( <i>DC</i> )	1.1044	1.3901	1.3901	1.51		1.1085	1.4410	1.35		1.1000	1.3372	0.80		1.1000	1.3372	0.80		1.1000	1.3372	0.80		1.1000	1.3372	0.80	
GDP per capita ( <i>GDPc</i> )	15.159	18.679	18.679	4.11		13.389	16.363	4.62		16.998	21.085	2.93		16.998	21.085	2.93		16.998	21.085	2.93		16.998	21.085	2.93	
GDP growth ( <i>GDPGr</i> )	0.0558	0.0320	0.0320	-12.84		0.0570	0.0301	9.43		0.0545	0.0340	-8.94		0.0545	0.0340	-8.94		0.0545	0.0340	-8.94		0.0545	0.0340	-8.94	

Table 4: **Cross-correlations.** For each of the 53 banks a median value was calculated for each variable of interest for the years from 1990 to 1994 (pre-EU) and a second median was calculated for the years from 1995 to 1999 (post-EU). This table reports cross-correlations. Significance levels are given in parentheses.

<b>Pre-EU (N=53)</b>							
Variables	<i>RoA</i>	<i>log(TA)</i>	<i>LM</i>	<i>LnoM</i>	<i>DC</i>	<i>GDPC</i>	<i>GDPCr</i>
<i>Log(TA)</i>	-0.461 (0.00)						
<i>LM</i>	0.170 (0.22)	-0.245 (0.08)					
<i>LnoM</i>	-0.137 (0.33)	0.272 (0.05)	-0.686 (0.00)				
<i>DC</i>	-0.070 (0.62)	0.315 (0.02)	0.140 (0.32)	-0.078 (0.58)			
<i>GDPC</i>	-0.029 (0.84)	0.478 (0.00)	-0.220 (0.11)	0.240 (0.08)	0.226 (0.10)		
<i>GDPCr</i>	0.036 (0.80)	-0.174 (0.21)	0.098 (0.49)	-0.217 (0.12)	0.067 (0.63)	-0.511 (0.00)	
<i>VM</i>	0.055 (0.69)	-0.188 (0.17)	0.193 (0.17)	0.004 (0.98)	-0.050 (0.72)	-0.324 (0.02)	-0.023 (0.87)

<b>Post-EU (N=53)</b>							
Variables	<i>RoA</i>	<i>log(TA)</i>	<i>LM</i>	<i>LnoM</i>	<i>DC</i>	<i>GDPC</i>	<i>GDPCr</i>
<i>Log(TA)</i>	-0.297 (0.03)						
<i>LM</i>	0.088 (0.53)	-0.251 (0.07)					
<i>LnoM</i>	-0.483 (0.00)	0.266 (0.05)	-0.387 (0.00)				
<i>DC</i>	-0.034 (0.81)	0.193 (0.17)	0.061 (0.67)	0.226 (0.10)			
<i>GDPC</i>	0.031 (0.83)	0.529 (0.00)	-0.227 (0.10)	0.090 (0.52)	0.109 (0.44)		
<i>GDPCr</i>	0.056 (0.69)	0.169 (0.23)	-0.292 (0.03)	0.145 (0.30)	-0.118 (0.40)	0.238 (0.09)	
<i>VM</i>	0.149 (0.29)	-0.179 (0.20)	-0.102 (0.47)	0.247 (0.07)	0.018 (0.90)	-0.312 (0.02)	-0.026 (0.85)

Table 5: **Related Lending and Bank Profitability: Pre- versus Post-EU Correlations.** OLS regressions with bank-specific fixed effects. The dependent variable is return on assets,  $RoA$ .  $TA$  is total assets.  $LM$  is the ratio of municipal loans to total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise. The loan variable in specification  $D_1$  ( $D_2$ ) is lending to municipalities (lending to non-municipalities). For each bank there is one observation pre-EU and one observation post-EU. t statistics are given in parentheses.

dependent variable = $RoA$	$D_1$	$D_2$
$Log(TA)$	-0.004 (-1.22)	-0.004 (-1.20)
Municipal loans/TA, $LM$	-0.039** (-2.25)	0.001 (0.21)
Post-EU dummy	-0.000 (-0.06)	0.015** (2.40)
$LM$ x Post-EU ( $\mathbf{a}_{LM}^E$ )	0.045** (2.62)	
Non-Municipal loans/TA, $LnoM$	-0.025*** (-3.13)	-0.004 (-0.55)
$LnoM$ x Post-EU		-0.017** (-2.02)
Muni. Debt per Capita, $DC$	-0.002*** (-2.89)	-0.002** (-2.48)
Muni. GDP per Capita, $GDPC$	-0.000 (-0.35)	-0.000 (-0.35)
Muni. GDP Growth, $GDPCr$	0.025 (0.70)	0.028 (0.77)
Constant	0.119 (1.64)	0.103 (1.34)
R-squared (within)	0.434	0.403
Observations	106	106
Groups (number of banks)	53	53
* p<0.10, ** p<0.05, *** p<0.01		

Table 6: **Politics and Related Lending: Causal Effects.** GLS regressions with bank-specific random effects. The dependent variable is return on assets, *RoA*. *TA* is total assets. *LM* is the ratio of municipal loans to total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise. We use three variables to identify politically competitive municipalities: *Pol1*, *Pol2* and *Pol3* are defined in detail in Table 2. For each bank there is one observation pre-EU and one observation post-EU. *z* statistics are given in parentheses.

dependent variable = <i>RoA</i>	<i>Pol1</i>	<i>Pol2</i>	<i>Pol3</i>
<i>Log(TA)</i>	-0.001*** (-2.79)	-0.001*** (-2.87)	-0.001*** (-2.84)
Municipal loans/TA, <i>LM</i>	-0.013 (-0.88)	-0.013 (-0.86)	-0.014 (-0.94)
Post-EU dummy	-0.000 (-0.04)	0.000 (0.06)	-0.000 (-0.08)
Political variable, <i>Pol</i>	0.001 (1.08)	0.002 (1.19)	0.002 (1.20)
<i>LM</i> x Post-EU ( $\mathbf{a}_{LM}^E$ )	0.012 (0.78)	0.010 (0.64)	0.013 (0.86)
<i>Pol</i> x Post-EU	-0.006*** (-2.93)	-0.006*** (-2.87)	-0.006*** (-2.89)
<i>LM</i> x <i>Pol</i>	-0.041 (-1.57)	-0.036 (-1.38)	-0.045* (-1.74)
<i>LM</i> x <i>Pol</i> x Post-EU ( $\mathbf{a}_{P,LM}^E$ )	0.057** (2.29)	0.056** (2.20)	0.059** (2.38)
Non-Municipal loans/TA, <i>LnoM</i>	-0.024*** (-3.76)	-0.022*** (-3.51)	-0.024*** (-3.89)
Muni. Debt per Capita, <i>DC</i>	-0.000 (-0.82)	-0.000 (-0.66)	-0.000 (-0.77)
Muni. GDP per Capita, <i>GDPC</i>	0.0003** (2.47)	0.0003** (2.24)	0.0003** (2.46)
Muni. GDP Growth, <i>GDPCr</i>	0.022 (0.86)	0.021 (0.79)	0.023 (0.90)
Constant	0.047*** (4.74)	0.047*** (4.72)	0.048*** (4.80)
R-squared	0.451	0.414	0.454
Observations	106	106	106
Groups (number of banks)	53	53	53

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

Table 7: **Politics and Lending to Other Clients.** GLS regressions with bank-specific random effects. The dependent variable is return on assets,  $RoA$ .  $TA$  is total assets.  $LM$  is the ratio of municipal loans to total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise. We use three variables to identify politically competitive municipalities:  $Pol1$ ,  $Pol2$  and  $Pol3$  are defined in detail in Table 2. For each bank there is one observation pre-EU and one observation post-EU. z statistics are given in parentheses.

dependent variable = $RoA$	$Pol1$	$Pol2$	$Pol3$
$Log(TA)$	-0.001*** (-3.41)	-0.001*** (-3.41)	-0.001*** (-3.42)
Non-Municipal loans/TA, $LnoM$	-0.013 (-1.34)	-0.012 (-1.20)	-0.012 (-1.26)
Post-EU dummy	0.023** (2.44)	0.012 (1.33)	0.015* (1.76)
Political variable, $Pol$	-0.011 (-1.28)	-0.009 (-1.08)	-0.010 (-1.21)
$LnoM$ x Post-EU	-0.030** (-2.41)	-0.015 (-1.30)	-0.020* (-1.72)
$Pol$ x Post-EU	-0.004 (-0.35)	0.011 (0.99)	0.006 (0.54)
$LnoM$ x $Pol$	0.016 (1.35)	0.014 (1.17)	0.015 (1.25)
$LnoM$ x $Pol$ x Post-EU	0.002 (0.16)	-0.017 (-1.12)	-0.010 (-0.72)
Municipal loans/TA, $LM$	0.001 (0.16)	-0.001 (-0.26)	-0.001 (-0.10)
Muni. Debt per Capita, $DC$	-0.000 (-0.30)	-0.000 (-0.12)	-0.000 (-0.22)
Muni. GDP per Capita, $GDPC$	0.0003** (2.42)	0.0002** (2.13)	0.0003** (2.49)
Muni. GDP Growth, $GDPCr$	0.032 (1.21)	0.025 (0.90)	0.030 (1.10)
Constant	0.043*** (3.68)	0.043*** (3.65)	0.042*** (3.65)
R-squared	0.409	0.353	0.388
Observations	106	106	106
Groups (number of banks)	53	53	53
* p<0.10, ** p<0.05, *** p<0.01			

Table 8: **Volume of Municipal Lending.** GLS regressions with bank-specific random effects. The dependent variable is the ratio of municipal loans to total assets,  $LM$ .  $TA$  is total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise. We use three variables to identify politically competitive municipalities:  $Pol1$ ,  $Pol2$  and  $Pol3$  are defined in detail in Table 2. For each bank there is one observation pre-EU and one observation post-EU. z statistics are given in parentheses.

dependent variable = $LM$	$Pol1$	$Pol2$	$Pol3$
$Log(TA)$	-0.006 (-0.97)	-0.006 (-1.00)	-0.006 (-0.94)
Profitability, $RoA$	-0.800 (-0.50)	-0.946 (-0.59)	-0.771 (-0.48)
Post-EU dummy	0.102*** (5.05)	0.105*** (5.28)	0.107*** (5.40)
Political variable, $Pol$	-0.004 (-0.29)	-0.0002 (-0.01)	0.0004 (0.03)
$Pol$ x Post-EU	0.027 (1.30)	0.023 (1.15)	0.020 (0.96)
Non-Municipal loans/TA, $LnoM$	-0.352*** (-4.26)	-0.360*** (-4.41)	-0.362*** (-4.42)
Muni. Debt per Capita, $DC$	0.011** (1.97)	0.010** (1.98)	0.010* (1.91)
Muni. GDP per Capita, $GDPC$	-0.003* (-1.75)	-0.003* (-1.80)	-0.003* (-1.75)
Muni. GDP Growth, $GDPCr$	-1.199** (-2.22)	-1.196** (-2.22)	-1.192** (-2.19)
Constant	0.523*** (3.85)	0.534*** (3.91)	0.525*** (3.85)
R-squared	0.795	0.792	0.792
Observations	106	106	106
Groups (number of banks)	53	53	53

\* p<0.10, \*\* p<0.05, \*\*\* p<0.01

Table 9: **Robustness Test.** OLS regression with bank-specific fixed effects (No Pol column) and GLS regressions with bank-specific random effects (remaining columns). The dependent variable is return on assets, *RoA*. *TA* is total assets. *LM* is the ratio of municipal loans to total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise. For each bank, we replace its post-EU level of *LM* with its pre-EU level in these specifications; i.e., pre-EU *LM* varies across banks but is constant across time. We use three variables to identify politically competitive municipalities: *Pol1*, *Pol2* and *Pol3* are defined in detail in Table 2. For each bank there is one observation pre-EU and one observation post-EU. z statistics are given in parentheses.

dependent variable = <i>RoA</i>	No Pol	<i>Pol1</i>	<i>Pol2</i>	<i>Pol3</i>
<i>Log(TA)</i>	-0.004 (-1.35)	-0.001*** (-2.63)	-0.001*** (-2.76)	-0.001*** (-2.69)
pre-EU LM		-0.006 (-0.29)	-0.002 (-0.11)	-0.006 (-0.31)
Post-EU dummy	0.001 (0.46)	-0.001 (-0.55)	-0.001 (-0.77)	-0.001 (-0.54)
Political variable, <i>Pol</i>		0.002 (1.42)	0.003* (1.82)	0.002 (1.49)
pre-EU LM x Post-EU	0.042** (2.46)	0.023 (1.37)	0.025 (1.50)	0.023 (1.43)
<i>Pol</i> x Post-EU		-0.003** (-2.57)	-0.003** (-2.04)	-0.004*** (-2.95)
pre-EU LM x <i>Pol</i>		-0.056* (-1.76)	-0.062** (-1.96)	-0.058* (-1.84)
pre-EU LM x <i>Pol</i> x Post-EU		0.058** (2.15)	0.049* (1.80)	0.061** (2.32)
Non-Municipal loans/TA, <i>LnoM</i>	-0.026*** (-3.24)	-0.027*** (-4.53)	-0.025*** (-4.28)	-0.027*** (-4.61)
Muni. Debt per Capita, <i>DC</i>	-0.002*** (-3.07)	-0.000 (-0.78)	-0.000 (-0.54)	-0.000 (-0.76)
Muni. GDP per Capita, <i>GDPC</i>	-0.0002 (-0.56)	0.0002** (2.18)	0.0002* (1.92)	0.0003** (2.27)
Muni. GDP Growth, <i>GDPGr</i>	0.023 (0.65)	0.017 (0.65)	0.017 (0.66)	0.019 (0.75)
Constant	0.128* (1.78)	0.049*** (4.96)	0.049*** (5.00)	0.049*** (4.99)
Bank Specific Effects	Fixed	Random	Random	Random
R-squared	0.419	0.419	0.373	0.431
Observations	106	106	106	106
Groups (number of banks)	53	53	53	53
* p<0.10, ** p<0.05, *** p<0.01				

Table 10: **Distribution of High-GDPC municipalities and politically competitive municipalities.** A banks is assigned  $HiGDPC=1$  if the region in which it is located had pre-EU GDP per Capita that was larger than the median pre-EU GDP per capita in our sample of banks.  $Pol$  variables are defined in Table 2.

	$HiGDPC=0$	$HiGDPC=1$
$Pol1=0$	18	7
$Pol1=1$	10	18
$Pol2=0$	19	7
$Pol2=1$	9	18
$Pol3=0$	20	7
$Pol3=1$	8	18



Table 11: **GDP per capita, Politics and Related Lending.** GLS regressions with bank-specific random effects. The dependent variable is return on assets,  $RoA$ .  $TA$  is total assets.  $LM$  is the ratio of municipal loans to total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise.  $HiGDPC$  is defined in Table 10. For each bank there is one observation pre-EU and one observation post-EU. In the second and third columns the sample is segmented according to  $Pol3$ , which is defined in Table 2. z statistics are given in parentheses.

dependent variable = $RoA$	Full Sample	$Pol3=1$	$Pol3=0$
$Log(TA)$	-0.001*** (-2.63)	-0.001*** (-2.66)	-0.001 (-1.24)
Municipal loans/TA, $LM$	-0.017 (-1.07)	-0.054* (-1.65)	-0.001 (-0.04)
Post-EU dummy	-0.000 (-0.23)	-0.001 (-0.15)	-0.001 (-0.77)
$LM$ x Post-EU	0.017 (1.05)	0.052 (1.53)	0.009 (0.54)
$HiGDPC$ x Post-EU	-0.003* (-1.67)	-0.005 (-1.47)	0.006** (1.97)
$LM$ x $HiGDPC$	-0.051** (-2.02)	-0.012 (-0.30)	0.001 (0.03)
$LM$ x $HiGDPC$ x Post-EU	0.063** (2.37)	0.047 (1.15)	-0.036 (-0.79)
Non-municipal loans/TA, $LnoM$	-0.024*** (-3.96)	-0.028*** (-3.37)	-0.017* (-1.91)
Muni. Debt per Capita, $DC$	-0.000 (-0.55)	-0.000 (-0.05)	-0.001* (-1.88)
$HiGDPC$	0.003** (2.24)	0.004* (1.95)	-0.000 (-0.19)
Muni. GDP Growth, $GDPGr$	0.014 (0.46)	0.086* (1.90)	-0.006 (-0.16)
Constant	0.050*** (4.99)	0.055*** (4.35)	0.042** (2.39)
R-squared	0.425	0.687	0.446
Observations	106	52	54
Groups (number of banks)	53	26	27
* p<0.10, ** p<0.05, *** p<0.01			

Table 12: **Politics, GDP per capita and Related Lending.** GLS regressions with bank-specific random effects. The dependent variable is return on assets,  $RoA$ .  $TA$  is total assets.  $LM$  is the ratio of municipal loans to total assets. The post-EU variable is equal to one if the observation is after 1995 and zero otherwise.  $Pol3$  is defined in Table 2. For each bank there is one observation pre-EU and one observation post-EU. In the second and third columns the sample is segmented according to  $HiGDPC$ , which is defined in Table 10.  $z$  statistics are given in parentheses.

dependent variable = $RoA$	Full Sample	$HiGDPC=1$	$HiGDPC=0$
$Log(TA)$	-0.001*** (-2.84)	-0.002*** (-3.16)	-0.001 (-0.62)
Municipal loans/TA, $LM$	-0.014 (-0.94)	-0.007 (-0.20)	0.004 (0.21)
Post-EU dummy	-0.000 (-0.08)	0.004 (1.33)	-0.001 (-0.61)
Political variable, $Pol3$	0.002 (1.20)	0.004* (1.85)	0.001 (0.29)
$LM$ x Post-EU	0.013 (0.86)	-0.016 (-0.39)	0.007 (0.38)
$Pol3$ x Post-EU	-0.006*** (-2.89)	-0.011*** (-3.67)	0.000 (0.03)
$LM$ x $Pol3$	-0.045* (-1.74)	-0.080* (-1.76)	-0.031 (-0.86)
$LM$ x $Pol3$ x Post-EU	0.059** (2.38)	0.131*** (2.78)	0.017 (0.43)
Non-Municipal loans/TA, $LnoM$	-0.024*** (-3.89)	-0.034*** (-3.83)	-0.013 (-1.57)
Muni. Debt per Capita, $DC$	-0.000 (-0.77)	0.000 (0.22)	-0.001* (-1.74)
Muni. GDP per Capita, $GDPC$	0.000** (2.46)	0.000 (0.98)	0.000 (0.14)
Muni. GDP Growth, $GDPCr$	0.023 (0.90)	0.046 (1.17)	0.007 (0.16)
Constant	0.048*** (4.80)	0.063*** (5.27)	0.029 (1.37)
R-squared	0.454***	0.704***	0.440
Observations	106	50	56
Groups (number of banks)	53	25	28

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The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities*.

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

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