

# FINANCING SMALL AND MEDIUM-SIZED ENTERPRISES (SMES) AND BANKING COMPETITION

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# TABLE OF CONTENTS

Introduction	1
Background and Competitive Analysis	2
Identification of Entry Barriers	5
Limited Credit Rationing and Product Range	17
Policy Proposals	21
Conclusion	25
References	26
About the Authors	29



## Introduction

Cross-country comparisons frequently indicate that there is a positive relationship between a country's financial development and its economic growth. Accordingly, a country's state of competition in its banking sector can carry considerable impact on its ability to sustain economic growth. The banking institutions in Israel, however, have been historically characterized by limited competition and limited provision of credit to households and small and medium-sized enterprises (SMEs).

In Israel, SMEs amount to 97 percent of all businesses, produce 50 percent of GDP, and employ 60 percent of all private-sector employees, yet they receive less than a third of bank-issued credit. At the same time, the five leading banks control nearly 90 percent of the banking assets, and the four leading banks control the major credit card networks.

This report addresses three specific issues: (1) What is the justification for reforming current banking regulations? (2) What are the regulatory impediments to competitive credit allocation in Israel? (3) What measures could be adopted to ensure a more competitive credit market?

The analytical approach of this paper is based on two fundamental propositions. First, competitive banking promotes credit allocation more effectively than centralized government initiatives. Second, for Israel to become a successful financial center, adequate financial opportunities must be provided to all market participants, regardless of their income level or demographics. For this reason, we conclude that any comprehensive attempt to reform financial markets in Israel must address the human and economic potential of all its participants. Similarly, any such attempts must also address prevailing barriers to competition in Israel's commercial banking sector.

The following section analyzes retail banking in Israel and identifies four barriers to lending: access to credit history data, access to payment card networks, prohibitive regulation of financial institutions, and regulation of non-bank commercial loans. The last section makes a number of policy recommendations and discusses some alternatives raised by the International Advisory Board to the Ariav Committee—formally known as the Interministerial Committee for Developing and Advancing Competition in the Capital Markets—as well as alternatives that were raised in the professional, academic, or financial media.



# **Background and Competitive Analysis**

Before reviewing the institutional framework of retail banking in Israel and considering its impact on competition, it may be useful to compare the development of Israel's banking sector, as measured by assets and credit, to those of the Organisation for Economic Co-Operation and Development (OECD) member nations.

Such comparison appears to indicate that Israel has a relatively small banking sector. This is illustrated in figures 1 and 2. Furthermore, Israel's limited provision of banking assets is *not* offset by a large presence of other financial institutions. This is evident in figures 3 and 4, which illustrate that bank assets continue to be the largest component of Israel's financial assets.

The banking sector in Israel is relatively small Ratio 5.8 6 5 4 2.8 2.9 2.6 3 1.9 2.0 1.7 1.7 1.8 2 1.3 1.3 1.3 1.1 1.1 1.1 1.2 1.2 0.8 1 Hungary Canada Korea Ireland Czech Republic Slovak Republic South Africa Netherlands Switzerland United Kingdom Iceland Poland Turkey **Juited States** Finland Australia Zealand Germany Belgium Sweden Austria Denmark

Figure 1. Ratio of bank assets to GDP, 2008

Source: International Monetary Fund (International Financial Statistics, World Economic Outlook)

Note: IFS data consists of banking corporations fully subject to liquidity regulation. It does not include mortgage banks.

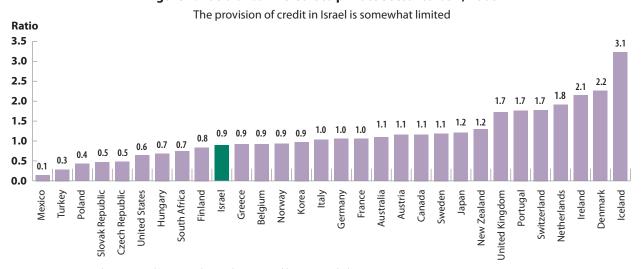


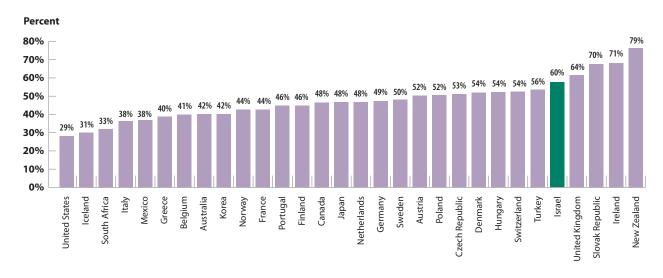
Figure 2. Ratio of bank credit to private sector to GDP, 2008

Source: International Monetary Fund (International Financial Statistics, World Economic Outlook).



Figure 3. Banking assets as a percent of total assets, 2008

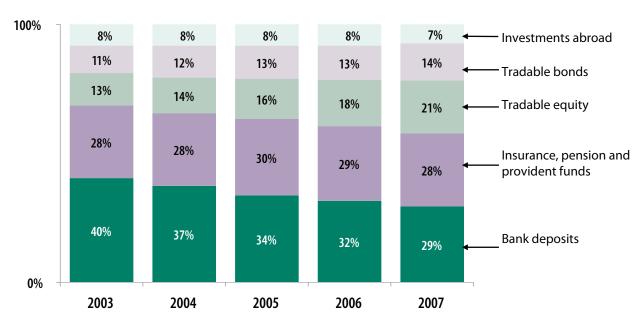
Banking assets account for a significant share of Israel's financial assets



 $Sources: International\ Monetary\ Fund\ (International\ Financial\ Statistics, World\ Economic\ Outlook),\ Bank\ for\ International\ Settlements,\ S\&P\ Global\ Stock\ Markets\ Factbook.$ 

Figure 4. Distribution of financial assets held by the public

Despite gradual decline, bank deposits remain largest public asset group



Source: Bank of Israel (Israel's Banking System, Annual Survey, 2007).



# **Identification of Entry Barriers**

Retail banking,<sup>1</sup> which remains the largest sector in Israel's financial markets, is characterized by significant entry barriers, a high concentration of assets among a relatively small number of banks, limited credit allocation, and relatively narrow choice of financial products. For these reasons, it can be reasonably inferred that there is not a significant level of competition among incumbent banks over households and SMEs.

Although the level of competition in retail banking cannot be directly observed, our analysis suggests that such entry barriers confer on Israel's five large banks a considerable ability to exploit market power and extract monopoly rents.<sup>2</sup> The combination of barriers to entry with the banks' market positions can be particularly harmful for SMEs and households because it results in considerable rationing of credit.

Market concentration, which measures how much output is controlled by a single bank or group of banks, is sometimes incorrectly used as an indicator of whether a certain market is competitive.<sup>3</sup> A common presumption is that fewer firms and more concentrated markets diminish incentives to compete. But when the concentration is caused by barriers that prevent additional firms from entering the market, either because of government policy or a lack of the necessary production assets, the entry barriers—not market concentration—are the underlying cause of limited competition,<sup>4</sup> as is the case in the Israeli credit markets.

Accordingly, measures of market concentration should not be confused with market power, which pertains to the ability of firms to extract monopoly rents. First, market concentration does not necessarily result from excluding competitors or creating entry barriers. Economies of scale—the cost savings obtained by supplying or buying larger quantities through a single firm—could also give rise to concentration. Second, even in the most concentrated markets, a firm (e.g., a monopoly) does not necessarily benefit from an ability to extract monopoly rents. If a firm's activities are undermined by the potential entry of rivals, it would not be able to extract monopoly rents, regardless of its size or market share. Therefore, market concentration alone does not indicate a market's competitiveness.<sup>5</sup>

In retail banking, this implies that a concentrated market is not necessarily an uncompetitive one. Small banking segments, in particular, may become considerably concentrated because of the cost advantages of economies of scale.

5

<sup>1</sup> For the purposes of this report, we interchangeably use the terms retail or commercial banking to refer to services for consumers and SMEs provided by "banking corporations," as defined in the Banking (Licensing) Law, 5741-1981. We focus primarily on the eight domestic banking groups and their respective provision of two broad categories of financial services: (a) payment and liquidity products and (b) varying types of credit products.

<sup>2</sup> The conclusion that entry barriers confer on incumbent banks the ability to exploit market power does not in any way suggest or imply that the banks have violated section 29A of the Restrictive Trade Practices Law 5748 – 1988. Note: We broadly define monopoly rent as the profits that are generated by a firm's ability to unilaterally raise prices above costs without inducing any responses from its rivals.

<sup>3</sup> Israel's Banking System, Annual Survey 2007, p.11, for example, relies on market concentration and interest margins to assess whether the banking sector is competitive in Israel. As we explain below, in and of itself, market concentration is not sufficient to infer that a certain market is not competitive.

<sup>4</sup> Contrary to the traditional approach, set forth by Bain (1956), we exclude cost advantages from the definition of entry barriers and focus on exogenous regulatory, legal, or strategic measures that prevent competitors from entering a market in a timely fashion. See Dennis Carlton (2004) for a useful discussion of the ambiguities surrounding the definition of an entry barrier.

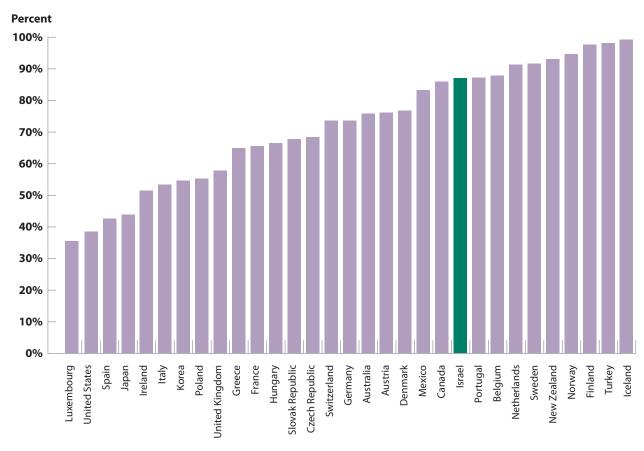
<sup>5</sup> Criticism of relying on concentration of a given industry to make inference about its level of competition can be traced back to George Stigler (1968). For additional treatment of this topic, see John Sutton's (1998) groundbreaking work, which demonstrates that industries where competition is very vigorous will be more concentrated than those where competition is not as vigorous. High concentration, far from being an indicator of a lack of competition, can indicate precisely the reverse.



Regardless of the specific causes for the banking concentration in Israel, three empirical regularities clearly arise from our analysis: Considerable concentration is characteristic of small economies, the retail banking market in Israel is exceedingly concentrated relative to developed markets, and this high concentration has not declined in recent years.

Israel's three leading banks controlled 88 percent of all bank assets in 2006, compared with an average 72 percent for OECD nations (see figure 5). While such concentration may be on par with certain small economies, the combination of the five banks' large market shares and the entry barriers detailed in this section severely limits credit competitiveness and capital access.

**Figure 5. International comparison of retail banking concentration**Percent of commercial bank loans controlled by a nation's three biggest banks



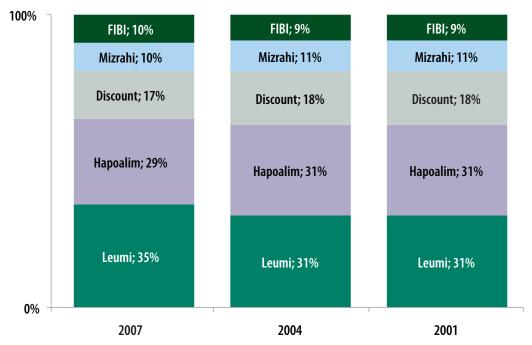
 $Source: World\ Bank\ (Bank\ Regulation\ and\ Supervision,\ 2008).$ 

In addition to market concentration, the market shares of Israel's five leading banks have remained practically unchanged over the past decade (see figures 6A and 6B), especially compared with the dynamic nature of the U.S. retail banking market.



Figure 6A. Relative market share of Israel's five leading banks

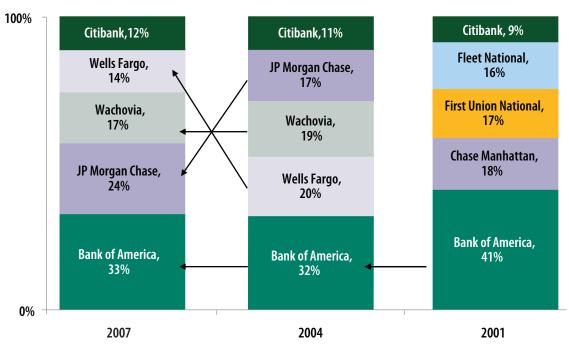
Banks' market shares and rankings have changed little since 2001



Source: Bank of Israel (Annual Information on Banking Corporations 2001–2008).

Figure 6B. Relative market share of five leading banks in the United States

Banks' market shares and rankings have shifted greatly since 2001



 $Source: Federal\ Deposit\ Insurance\ Corp.\ (Summary\ of\ Deposits,\ 2001-2007).$ 



With respect to specific barriers of entry, our analysis has identified critical barriers that should be addressed by the Ariav Committee.

## **Entry Barrier 1: Limited Access to Credit Scoring and History**

In contrast to traditional market settings where consumers are valued based on their willingness to pay for a given product, retail banking typically requires extensive information to assess a consumer's ability to repay debt. Information about a borrower's assets, credit worthiness, payment commitments, and history is essential for any bank in assessing the risk of extending credit to a potential customer.<sup>6</sup> Therefore, a bank's viability depends on private information held exclusively by its rivals.<sup>7</sup>

For this reason, disclosure of consumer credit history has been regulated in most developed nations for nearly four decades. The 1970 U.S. Fair Credit Reporting Act (FCRA), which was amended in 1996, is considered by many to be an effective framework for disseminating credit information. Israel passed a credit scoring law in 2002 and specific credit scoring regulations in 2004. Figure 7 compares some key elements of the FCRA and the Israel Credit Data Services Law, 5762-2002.

Figure 7. Comparison of credit reporting regulation in Israel and the U.S.

**Israel Credit Data** 

U.S. FCRA, 1970 Services Law, 2002 Positive information subject to individual Individuals could opt out, otherwise **Disclosure requirements** approval or nonpayment notification all information disclosed to agencies **Distribution of positive information** Subject to consumer's approval Permitted unless consumer opts out ? FCRA was initially interpreted and **Prescreening** later modified to explicitly permit prescreening (1) Accuracy of information, Dimensions of agencies' competition (2) Speed of processing updated information

Although a credit scoring law and certain regulations are in effect, we conclude that the current disclosure standards do not provide adequate access to credit information, prevent the formulation of credit scoring, and hence ultimately serve as a barrier to entry. This conclusion is supported by the findings of (a) limited customer mobility in the retail banking service; (b) limited disclosure requirements stipulated in the law; and (c) infrequent use of the credit history regulation in Israel. Significant modifications are therefore required to ensure that potential entrants and/or small banks are provided adequate information.

<sup>6</sup> Absent such information, rival banks cannot effectively compete for two reasons. First, they would be constrained to a strategy of uniform pricing, which may prevent them from successfully attracting new customers. See Klein and Wiley (2003) for a discussion of the strategic advantages of competitive price discrimination. Second, lack of credit history creates an adverse selection bias; customers switching to the entrant banks would tend to have poor credit histories and a higher risk of defaulting. See Mester (1994), Dell'Ariccia et al. (1999) and Stiglitz and Weiss (1981) for a discussion of adverse selection in banking.

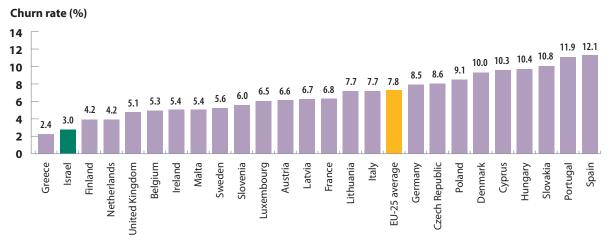
<sup>7</sup> Padilla and Pagano (1997) provides a useful model for understanding the strategic tradeoffs faced by banks in a credit history sharing scheme.



As illustrated in figures 8 and 9, which provide comparative measures of customer mobility in retail banking, Israel has exceptionally limited customer mobility and considerable extended longevity of bank accounts. Given the dependency found in the economic literature between customer mobility and availability of up-to-date credit information, we find that such abnormalities are suggestive of inadequate information disclosure as detailed above.

Figure 8. International comparison of customer mobility

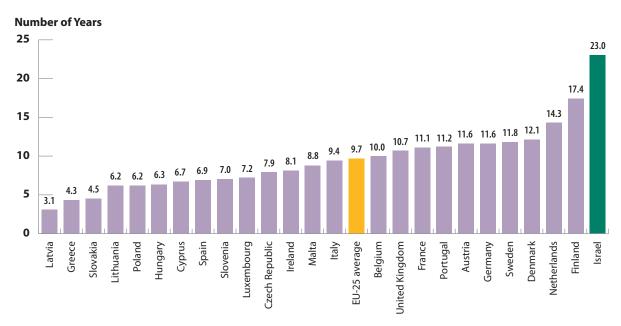
Customers' mobility between banks is exceptionally low in Israel



Sources: Organisation for Economic Co-operation and Development, Knesset Research and Information Center.

Figure 9. International comparison of customer longevity

Customers' longevity with their banks is exceptionally high in Israel



Sources: Organisation for Economic Co-operation and Development, Knesset Research and Information Center.



## **Entry Barrier 2: Limited Access to Payment Card Networks**

One important feature of banking competition that has evolved over the past two decades is competition between credit card networks. Credit card networks serve both banks and cardholders by enabling a cardholder to make purchases against either credit or funds the cardholder holds at the card-issuing institution. More importantly, with respect to lending competition, credit card networks can presumably facilitate credit provision by enabling rival banks to issue credit lines to different individuals even if they do not manage their demand deposit bank accounts.

In the past decade, the Antitrust Authority has made numerous attempts to improve both payment card membership rules and fees. However, our analysis suggests that the four leading banks' control of the three card networks in Israel—Visa, MasterCard and American Express—largely eliminates any provision of household credit by rival card networks. This conclusion is based on three important observations: (a) limited intra-brand competition among card issuers (b) limited credit allocation through payment cards and (c) limited access to payment card networks.

Figure 10 highlights these observations. In particular, it indicates that competition among issuers of the same network brand (i.e., intra-brand competition) is marginal because payment card networks in Israel are restricted to mostly a single issuing bank. Allocation of household credit in Israel is also limited because most payment cards are deferred debit cards that do not extend a revolving line of credit.

Figure 10. International comparison of credit provision through card networks

	Israel	Austria	U.K.	U.S.	Global
<b>Type of payment cards</b> Debit or deferred payment cards Revolving credit cards	98%	52% 48%	35% 65%		
Card issuer Cardholder's bank Other card issuer	87% 13%				
AMEX market share		17%		14%	11%

Note: Preliminary and incomplete.

Sources: Evans and Schmalensee (2005), Australian Reserve Bank, U.K. Office of Fair Trade.

Similarly, because of the ownership structure of payment card networks in Israel, access to such networks could also be more limited, at least in comparison to networks in other countries. Although it is rarely profitable for a credit card network to restrict access to third-party issuers, it is possible that, in certain circumstances, limiting access to additional card issuers could become anticompetitive. One situation where incumbent banks could profitably prevent access to a card network is when there is a single network and credit cards are the only viable option for entering the consumer credit market. In such circumstances, a monopoly network owned by incumbent banks could have sufficient incentive to prevent third-party issuance.

<sup>8</sup> See Evans and Schmalensee (2005), Chapter 11 for a brief review of the antitrust developments pertaining to payment card networks in the past two decades. Additionally, Rochet and Tirole (2005) provide a useful roadmap to the economic principles underpinning competition in payment card networks and two-sided markets.



If there are both significant entry barriers to retail banking that prevent competition in the provision of credit, as well as the potential for undermining such barriers through credit cards, then incumbent banks may find it profitable to sacrifice revenue in their credit card network to collectively foreclose the retail banking segment. Although there are clear benefits, even in the scenario above, for banks to enable an additional issuer to join their card network, conflicts may arise when incumbent banks find it privately profitable to block access to their networks altogether. Such conflicts could be harmful if there is very little inter-brand competition (between American Express and MasterCard, for instance) and incumbent banks prevent non-bank members from issuing credit through payment card networks.

The alleged conflict between private interests of incumbent banks and competitive access to issuers does not justify a divestiture of payment cards from banks. While the economic basis for such divestiture is questionable, the potential competitive outcome of such market share redistribution is even less clear. It is, however, imperative to maintain inter-brand competition between card networks. In this respect, control of two payment card brands by a single large bank could be anticompetitive if it transforms the credit card industry from a three-player to a two-player market structure.

## **Entry Barrier 3: Prohibitive Regulatory Oversight**

Because the financial well-being of banking institutions contributes considerably to a country's financial stability, banks require oversight. Such oversight affects the strategies, effectiveness, and level of competition among banks subject to regulation. Considerable research in the past decade has come to question the effectiveness of supervisory oversight of banks while demonstrating that such oversight has significant implications for competition.<sup>9</sup>

The regulatory situation in Israel exemplifies the complexities of evaluating the effectiveness of strict banking oversight. Israel has not witnessed a severe banking crisis since 1983 and has so far withstood the current financial crisis. But is this perceived stability occurring because of or in spite of the current regulatory regime? Is Israel's regulatory oversight harmful to competition, and if so, in what way? Both questions are complex and should be thoroughly addressed beyond this brief discussion. We will, however, attempt to highlight specific policies that could harm competition, independent of their potential impact on financial stability.

#### **Bank of Israel Proper Conduct Code**

The Proper Conduct of Banking Business Regulations affords the Bank of Israel significant regulatory discretion over banking. In addition to risk management or prudential standards, the conduct code also regulates such things as dividends, corporate governance, standards for handling telephone transactions, and requirements for days of operations. The exceptional degree of restrictions that Israel imposes on banking corporations is reflected in figure 11A.

Although certain requirements in the conduct regulation may have an impact on banks' financial stability, the totality of such standards could also cause significant compliance costs, which would ultimately prohibit potential entrants from accepting deposits or issuing credit. In this context, there are two groups of competitors that may be affected by the conduct regulation provisions: foreign banks and non-depository financial firms. To the extent that foreign banks or non-depository firms in Israel (such as insurance or fund managers) face fewer restrictions in their respective markets, offering credit and complying with the conduct regulation

<sup>9</sup> Barth et al. (2006) provides a brief review of the literature and some of the most comprehensive cross-country research of financial regulation and its effectiveness.

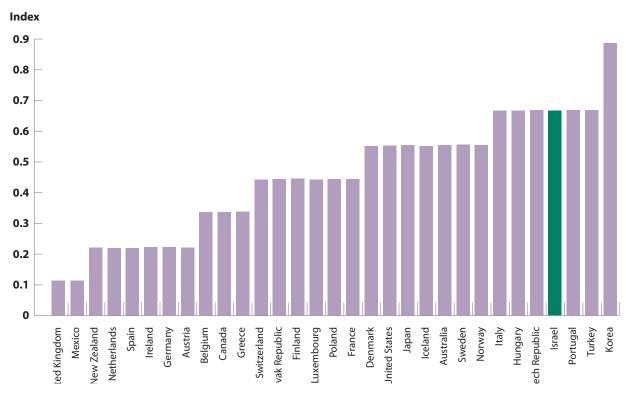


could be prohibitively costly for such firms. This may be particularly true when there is significant variation in regulatory requirements between banks and other financial institutions.<sup>10</sup>

Despite the Bank of Israel's stated non-discriminatory policy, foreign banks have not made significant investments in large-scale branching or operations in Israel. According to a recent comparison of regulatory practices, Israel fares poorly with respect to entry barriers imposed on foreign banks. Barth et al. (2007) offers additional details of the study's methodology. Its main findings are highlighted in figure 11B.

Figure 11A. Regulation of banking activities

Banks' activities are highly regulated in Israel



Source: World Bank, Banking Supervision Survey, 2006.

<sup>10</sup> Variation in regulatory requirements across function (i.e., banking, insurance, securities) has raised considerable concerns not only in Israel but also in a number of developed markets. In the U.S., a recent report by the Secretary of Treasury cites functional regulation, which maintains separate regulatory agencies across segregated functional lines of financial services, "largely incompatible" with market developments. Similarly over a decade ago, the U.K. has consolidated regulatory authorities for very similar concerns, in what is largely viewed as a very successful contribution to the competitiveness of the U.K. economy.



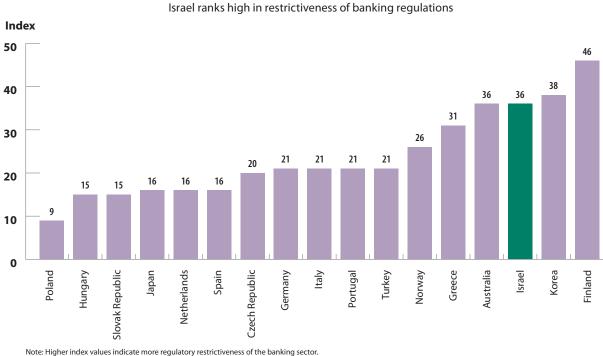


Figure 11B. Comparison of a comprehensive index of market openness

Note: Higher index values indicate more regulatory restrictiveness of the banking sector. Source: Barth et al. (2007)

## **Regulation of Commissions and Fees**

Another concern is the regulation of banks' commissions and fees. Although the Bank of Israel recently revised certain aspects of fee setting to attain better coherence, it left the regulation of fees fundamentally unchanged by continuing to review, authorize, and ultimately determine fee changes as stipulated in the Banking (Customer Service) Law, 5741-1981.

This practice is troubling for a number of reasons. Given recent allegations that bank fees have been subject to illegal price fixing<sup>11</sup> as well as the tendency of price regulation to provide "convenient" focal points for coordination between competitors, 12 it is unclear whether fee regulation is altogether effective. Also, it is possible that regulation, even if effective at reducing fees, can be offset by other banking revenue, such as interest rates.

Perhaps the most worrisome aspect of fee regulation is that it may put smaller banks and potential entrants at a disadvantage. If larger banks do benefit from any market power, 13 fee regulation does not prevent them from obtaining higher interest rate margins, as illustrated by figures 12 and 13. On the other hand, if such regulation is effective at reducing or eliminating fees—the reason they were put in place to begin with—then smaller banks that do not have high interest rate margins may be disproportionately harmed by lower fees. Hence, even if the

<sup>11</sup> We have not considered and do not opine whether such fees have been subject to illegal price-fixing, but rather point out that it remains unclear what would be a competitive level of such fees in Israel.

<sup>12</sup> See Thomas Schelling (1960), George Stigler (1964).

<sup>13</sup> As we conclude below, based on low customer mobility, significant entry barriers and informational asymmetry, it is possible that retail banks benefit from a degree of uncontested market power.



regulation is effective at reducing banks' revenue, it may restrict smaller banks more than larger banks. In this respect, the commission fee regulation, which is possibly the most publicized competition initiative by the Bank of Israel, may unintentionally cause anticompetitive harm.

Larger banks obtain higher interest rate margins **Percent** 3.5 3.0 3.0 2.8 2.5 2.0 1.8 1.8 1.7 1.5 1.5 1.4 1.5 1.5 1.4 1.3 1.3 0.9 1.0 0.5 0.0 Hapoalim Leumi Discount Mizrahi FIBI Union Jerusalem

Figure 12. Interest and commission revenue across banks

Source: Bank of Israel (Annual Information on Banking Corporations 2007).

Interest rate spread

Revenue from interest rates is relatively high in Israel **Percent** 50 50 40 34 30 26 21 21 19 18 20 15 13 10 Australia China Indonesia Brazil France Italy India Canada Turkey South Africa Russia Mexico Korea Germany Jnited Kingdom United States Isreal Saudi Arabia Argentina

Figure 13. Interest rate revenue as share of banks' total income

Commission revenue as percent of public deposits

Source: Bankscope, 2006.



## **Licensing Requirements for Accepting Deposits**

The Banking (Licensing) Law, 5741-1981 requires any financial institution that accepts cash deposits to obtain a banking license and comply with the Supervisor of Banks' prudential and conduct oversight. Accordingly, non-depository institutions such as provident or mutual funds, which pose the most immediate competitive threat to retail banks in Israel, are prohibited from investing funds from their investors directly in credit to households and SMEs. Although a licensing requirement is common in most, if not all, developed financial markets, in Israel this requirement limits the ability of non-depository institutions to offer competitive credit to households and SMEs.

Specifically, the combination of the licensing law's ban on non-depository institutions accepting deposits and illiquidity in the broader financial market creates a situation in which non-bank institutions must themselves obtain credit from licensed banks to compete in SME and household lending. Although dependency on bank credit by potential competitors is not always anticompetitive, <sup>14</sup> in light of the other barriers to competition detailed in this report, it could harm the viability of non-banks in offering competitive credit in Israel.

## **Entry Barrier 4: Limits on Non-bank Consumer Loans**

The Regulation of Non-Bank Loans Law, 5753-1993, which was revised in 2007 to cover loans of up to NIS 1 million, was initiated to protect consumers from exploitation by non-bank lenders. The law was intended to address certain "black market" lenders that reportedly offered loans at annual interest rates exceeding 100 percent. It requires minimal disclosure of the name of the lender, annual interest rate, repayment schedule, and other relevant information. It also caps the legal interest rates for all non-bank loans at the average unindexed interest rate reported by the Bank of Israel multiplied by 2.25. In August 2009, the average unindexed rate was 4.01 percent, making 9 percent the legal maximum for non-bank lending.<sup>15</sup>

This legal limit on interest rates, from which banks and their subsidiaries are exempt, has a severe anticompetitive impact for two reasons. It prevents non-bank institutions from offering credit to the one group that needs it most: risky customers who cannot obtain a bank loan. In this respect, it places financial distress on customers who have faced difficulties obtaining credit from banks. It also restricts non-banks to levels of interest rates that may not be profitable. For these two reasons, such limitations serve as an entry barrier.

In summary, based on the analysis of entry barriers above, we find that the absence of credit unions, community development financial institutions, foreign banks, and other alternatives largely results from a failure to accommodate the economics of non-depository institutions through proper legislation and regulation. It should be further noted that, in contrast to the insurance industry, where two of Israel's leading insurance firms are controlled by foreign companies, none of Israel's leading banks has been acquired by foreign banks despite the fact that foreign banks play a vital role in international markets and the domestic financial markets of many small economies.

<sup>14</sup> If there is significant competition between banks and if non-banks provide value-added services (such as better credit provisions) by purchasing credit from banks and distributing it to consumers, such dependence would not be anti-competitive.

<sup>15</sup> Office of the Spokesperson and Economic Information, "Costs and Net Interest Margins in the Unindexed Local-Currency Segment, (09/09), and the Average Interest Rate, (08/09), that Serves as a Basis for Interest on the 'Gray Market,' "Bank of Israel, 2009.

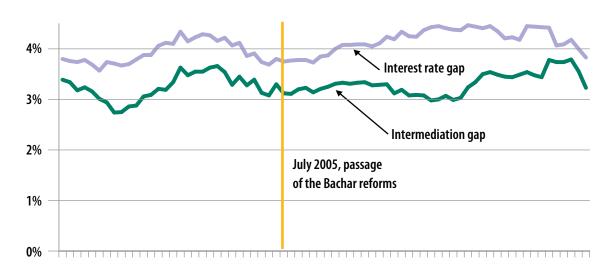


### **Recent Banking Reforms**

It has been suggested by many that the divestiture of provident and mutual funds stipulated by the 2005 Bachar reforms has brought non-financial firms closer to retail banking competition by providing a toehold in household financial services. These reforms have reduced the level of banking assets in Israel (see figure 4).<sup>16</sup>

However, it is imperative to recognize that divesting complimentary products (long-term savings, for example) from retail banking services (such as management of checking accounts) does not necessarily reduce the ability of retail banks to extract monopoly rents.<sup>17</sup> Reviewing the interest rate margins of the leading five banks since the reforms suggests that the reforms to date have not produced a significant decline in interest rate margins (see figure 14). For this reason, and as was initially stated in the Bachar Committee report, it is critical to resolve any regulatory barriers to retail banking so additional financial firms can provide meaningful competition. As we argue below, it is critical to address all three entry barriers for meaningful competition in the banking segment to take place.

**Figure 14. Evolution of retail banking interest rate margins**Divestiture of funds did not reduce intermediation margins



Source: Bank of Israel (Annual Information on Banking Corporations 2002 – 2007).

<sup>16</sup> It should be noted that the increase in non-bank financial assets in Israel is unlike the gradual increase in non-bank financial assets in other developed countries. This is because in Israel the change stemmed from a requirement to divest provident and mutual funds; in other economies non-bank finance increases were a gradual response to changing market pressures. Goldwasser et al. (2006) reviews the impact of the Bachar reforms and highlights some additional issues that have not been addressed since the reforms.

<sup>17</sup> The retail banking situation could be compared to requiring a monopoly shoe maker to divest its ownership of production facilities for left shoes and keep facilities for right shoes. Whether the monopoly supplies one or both shoes would not affect its ability to collect monopoly rents in this example. See Klein 1993 and Posner 1976 for further discussion of monopoly leverage in complimentary markets.



# **Limited Credit Rationing and Product Range**

As a result of the limited customer mobility, information asymmetry and barriers to entry, retail banking in Israel suffers from limited competition. A clear outcome of this limited competition is rationing—the act of limiting the supply and increasing market prices. In the retail banking segment, rationing places severe limitations on the credit provisions to both SMEs, lower-income households, and less developed regions of the country for two reasons. First, SMEs and lower-income households may pose a higher risk because they find it more difficult to repay loans. Therefore, customers with a perceived higher default rate and lower incomes will likely be the first victims of rationing when markets are not competitive. Second, in markets where credit history is not prevalent, banks may require higher collateralization from SMEs and lower-income households, which would in turn reduce the provision of credit even further.

**Cumulative credit** 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 0% **Cumulative borrowers** Equality **Business** General

Figure 15. Distribution of credit by borrowers' wealth

Richest 10% of households receive over 85% of non-commercial credit

Source: Koret Israel Economic Development Funds (Economic Reform Studies, 2005).

For these reasons, retail banking markets that are not competitive suffer from significant inequality in lending practices, with a disproportionately small number of businesses or households using the majority of available credit (see figure 15). Furthermore, while SMEs constitute 97 percent of all Israeli businesses, produce 50 percent of GDP, and employ 60 percent of all private-sector workers, they received just 27 percent of bank credit in 2005 (see figure 16). Social ramifications aside, such credit inequality imposes enormous constraints on entrepreneurial growth; the ability of firms to create jobs, income, and wealth; and Israel's capacity to become a leading financial center. 19

17

<sup>18</sup> Lower-income consumers may ultimately pay more for a loan than higher-income consumers. This is contrary to what typically takes place in traditional markets where suppliers price-discriminate based on a customer's perceived income. See data and analysis from Bank of Israel Annual Report, 2006, and a study of small-business lending by Parag (2005).

<sup>19</sup> Beck et al. (2006), for example, uses changes in banking deregulation between states and across time to illustrate that greater competition results in less income inequality. That work relies on models that link credit allocation to inequality by Galor and Zeira (1993) and Banerjee and Newman (1993).



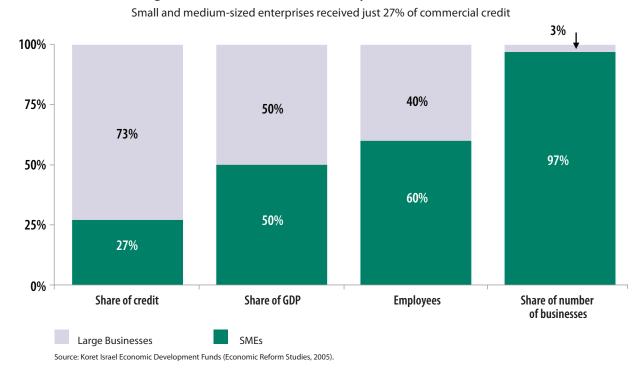


Figure 16. Contributions vs. credit, by size of business, 2005

## Approaches to Credit Inequality in the U.S. and U.K.

Although there is an undeniable link between competition and equitable credit provisions,<sup>20</sup> the peculiarities of financial intermediation frequently lead to significant inequality in lending even in markets that are highly competitive. For this reason, a number of countries have adopted measures that address credit shortages to SMEs and low- and moderate-income neighborhoods, communities, and regions while maintaining a competitive environment.

The longest-standing measure is the U.S. Community Reinvestment Act (CRA). Enacted by Congress in 1977 in response to concerns over discrimination in lending, the CRA directs banks to meet the credit needs of all borrowers in their communities, consistent with sound banking practices. It specifically mandates that banks reach customers in low- and moderate-income areas. Regular reviews of the banks generate publicly disclosed CRA ratings. A low rating could challenge the approval of a merger (in the confines of a merger review process by the U.S. Department of Justice or other agencies), expansion plans, or product line development and could damage a bank's reputation.<sup>21</sup>

<sup>20</sup> See Cetorelli (2001); Cetorelli and Starhan (2006); and Beck, Demirguc-Kunt, and Maksimovic (2003) for empirical support of the notion that greater banking competition induces more equality.

<sup>21</sup> Barr (2006) considers the impact of CRA provisions on credit to low-income households and SMEs.



Several other federal and state initiatives have successfully encouraged funding of SMEs and underserved regions in the United States. These include:

- The federal Community Development Financial Institutions Fund, supporting community development lenders through direct investments, loans, and technical assistance
- The federal New Markets Tax Credit program, which offers taxpayers credit for investment in designated entities
- Credit enhancement programs that enable established investors such as pension funds to "lend" their credit ratings to municipal and community projects, reducing the borrowing costs from bond financing

The incentive structure of these mechanisms alters the cost structure so that private capital finds it profitable to issue credit to lower-income households and SMEs. As a result of these ventures, many institutional investors have identified providing funding to low-income households and SMEs as a market opportunity.<sup>22</sup>

Great Britain's Community Investment Tax Relief legislation provides a tax credit of up to 25 percent for investments in community and social projects, through community development finance institutions. No collateral is required from borrowers, extending the program's reach into lower-income communities. In addition to tax credits, distinct models of community investment have existed in the United Kingdom through credit unions, community loan funds, micro-finance funds, mutual guarantee societies, and social banks. The default rates in these models are similar to those of standard loans.

Australia, Canada, and Brazil have addressed community reinvestment and fair credit through legislative, tax, and regulatory policy innovations.<sup>23</sup> Few of these innovations have been effectively introduced in Israel.

#### Securitization

An additional factor that exacerbates the concentration of credit allocation in Israel is the absence of a legal infrastructure for a secondary loan market and asset securitization. Asset securitization, a technique that allows credit to be provided directly through market investors rather than through banks, can effectively increase credit allocation to SMEs and underserved regions, particularly in situations where credit is not allocated competitively and significant informational asymmetries exist.

The Committee for the Examination of Various Aspects of Securitization in February 2006 made several legislative and regulatory recommendations that remain largely unaddressed and could provide a framework for legalizing securitization in Israel. The absence of such a legal framework limits the prevalence of asset-backed securities in Israel (see figure 17).

<sup>22</sup> Urban real estate and private equity have proved particularly attractive. Since 2000, the California Public Employees' Retirement System (CalPERS) has targeted a portion of its private equity investments in California's underserved markets, earning annual returns of 16.3 percent (as of September 30, 2005). Furthermore, CalPERS' capital allocation of \$500 million in its California Initiative has leveraged commitments of \$725 million from additional investors.

<sup>23 &</sup>quot;A Global Survey of Community Reinvestment Laws", Woodstock Institute, August 2004.



250 230 200 150 100 59 40 37 50 34 15 Israel Netherlands **United Kingdom** Spain Portugal **United States** 

Figure 17: International comparison of securitization to GDP 2006-2008 average

Source: Dealogic Analytics, International Monetary Fund, World Economic Outlook Database.

In addition to the report's recommendations, two other elements could enhance the potential for financing SMEs through asset-backed securities: permitting either banks or other loan originators to design SME-specific special purpose entities (SPE), and allowing authorized credit data agencies, as defined by the Credit Data Services Law, to collect sufficient information to rate SME asset-backed securities.

Expanding the scope of the information that could be obtained by authorized credit data agencies could facilitate the creation of databases suitable for the needs of securitization. This data would then be available for analysis or pooling, taking into consideration geographic and professional parameters as well as the type of securities involved.

Once data agencies are permitted to collect such information, and after the legal obstacles for credit rating are removed, standardization of credit ratings could facilitate securitization because it would allow an assessment of the risk involved in purchasing SPE-issued assets. A credit rating system based on uniform standards would enhance the risk assessment of businesses and individuals and hence improve the allocation of credit.<sup>24</sup>

<sup>24</sup> Dvir and Terri (2005) discusses the importance of credit rating for the formation of secondary loan markets and asset-backed securities in Israel.



# **Policy Proposals**

This analysis points to a number of specific measures that would remove ancillary entry barriers and, as a result, induce greater competition in retail banking and provide greater access to credit for households and small and medium-sized businesses.

#### 1. Revise the Credit Data Services Law, 5762-2002.

Based on our initial review, we recommend revising three elements of the Credit Data Services Law, 5762-2002 and the Credit Data Services Ordinance, 5764-2004:

- Collection of positive information: Revise Chapter C of the ordinance and Section 17 and 18 of the law to allow positive information to be collected by a credit data agency independent of the consumer's consent or any other causation.
- Distribution of credit rating: Remove Section 26 of the law or at least revise it to allow credit data agencies to compute and distribute FICO or other internationally acceptable credit rating scores.
- Deadlines for information disclosure: Revise Chapters B and C of the ordinance to stipulate that both positive and nonpayment information must be disclosed to a credit data agency within a reasonable time and no later than seven working days.

We also identified two areas of concern regarding the availability of credit data: Should credit data agencies be explicitly authorized to provide competitive financial information (such as prescreening) without explicit individual consent? Does the ordinance provide sufficient financial incentives for a commercial credit market to develop?

### 2. Allow non-bank lenders to operate credit card networks.

Based on our initial analysis of credit card institutions in Israel, we are skeptical of either the need or justification for divesting banks' holdings in credit card companies altogether, as has been proposed in the popular press.

We support modifying the Debit Cards Law, 5746-1986, to prohibit a credit card company holding a market share larger than a certain threshold from controlling multiple credit card brands, to require the company to divest any ownership or financial interests in such brands, and to rescind any relevant licensing agreements by a certain date.



## 3. Remove regulatory barriers to depository institutions.

Based on the analysis above, and contingent on the removal of additional entry barriers, we propose the following:

- Revise the Banking (Customer Service) Law, 5741-1981, so the Bank of Israel no longer has authority to approve changes in bank commissions but maintains its authority to encourage consumer awareness of fees.
- Review the Proper Conduct of Banking Business Regulations to determine whether the current oversight of dividends, corporate governance, standards for telephone transactions, and days of operation increases banks' financial stability.
- Conduct a broad review of regulation to determine whether certain aspects (such as the conduct regulations) can be revised to apply to all financial institutions, ultimately moving from today's functional regulatory approach that differentiates between banks and insurance companies to a uniform regulatory regime.

#### 4. Remove regulatory barriers to non-depository institutions.

- Modify the Regulation of Non-Bank Loans Law, 5753-1993 to remove restrictions on reasonable lending practices. Specifically, the current rate cap on non-bank lending is largely anticompetitive.
- Modify the Banking (Licensing) Law, 5741-1981 to exempt non-depository institutions such as insurance, mutual, and provident funds from obtaining a banking license, even if they invest a maximum percentage of their assets in issuing credit to households and SMEs. The exemption must be contingent on reasonable transparency and reporting standards to either the Bank of Israel or the Ministry of Finance.

## 5. Provide a framework for legalizing asset securitization and collateralized loan obligations.

- Legislate a comprehensive securitization law based on the report of the Committee for the Examination of Various Aspects of Securitization. The law should describe the specific characteristics of securitization sales, such as the status of a special purpose vehicle (SPV), the transfer of rights, defining a verified sale, and so forth. This would reduce uncertainty and regulate legal, tax, and accounting procedures for securitization.
- Revise Section 26 of the Credit Data Services Law, 5762-2002 to allow standardized credit rating and collection of data for rating asset-backed securities.
- Exempt loan originators from restrictions on the composition of assets transferred to SPEs by allowing the design of SME-specific SPEs.



## 6. Implement a fair credit policy.

- Construct standards for publicly disclosed ratings of fair credit similar to the U.S. Community
  Reinvestment Act. The Bank of Israel should develop computation standards, disclosure requirements,
  and publication procedures for fair credit ratings.<sup>25</sup>
- Allow established investors to "lend" their credit ratings and/or explicitly guarantee SME loans for a fee.
- Provide a tax credit of up to 25 percent for providing credit to SMEs in cases where credit is extended without any collateral requirements for borrowers.

<sup>25</sup> Sperer et al. (2007) discusses proposed revisions of Article 5(e) of the Banking Directives, 1941, that would provide a framework for reporting the provisions of fair credit.



## **Conclusion**

Institutional barriers to competitive lending harm consumers by preventing entry and conferring on incumbent banks the ability to avoid reasonable risk, demand higher collateralization, and limit the amount of credit. For these reasons, removing entry barriers would improve credit provisions in a number of ways.

It should be noted, however, that given Israel's market size and branching costs, it is unclear whether removing barriers would result in a dramatic reduction of market concentration. In fact, it is even likely that the entry of a more efficient foreign bank, for example, could actually increase market concentration.

For this reason, the touted "duopoly problem" caused by the large market shares held by Israel's two leading banks is a popular misconception that diverts attention from more important, underlying causes of uncompetitive practices in the financial services industry. The underlying causes of the poor provision of credit and financial services are the key entry barriers described above, which are largely the product of regulation that protects incumbent banks.

There is a tremendous difference between a concentrated market that is competitive and the state of Israel's retail banking today. Divesting retail banks of provident and mutual funds will not alone produce sufficient competitive alternatives to bank credit unless a genuine attempt is made to revise, reduce, and harmonize regulatory barriers for non-depository institutions.

It is essential to address the insufficient provisions of credit scoring information, the deterrent regulation of non-banking institutions, the considerable regulatory oversight of banks, and the need for a framework for securitizing financial markets to realize the nation's considerable economic potential. Any reform seeking to advance investment by foreign capital, deter domestic capital flight, and transform Israel's markets into a competitive global financial center must address the reality that the vast majority of Israel's innovative and productive capacity suffers from the prohibitive cost of capital and limited access to competitive credit.



## References

Bain, Joe. *Barriers to new competition: Their character and consequences in manufacturing industries.* Cambridge, MA: Harvard University Press, 1956.

Banerjee, Abhijit and Andrew F. Newman, 1993, Occupational choice and the process of development, *Journal of Political Economy* 101, 274-98.

Barr, Michael, Credit where it counts: The CRA's role in revitalizing low- and moderate- income communities, Federal Reserve Bank of San Francisco, Winter, 2006:12–13.

Barth, James, Gerard Caprio, and Ross Levine, *Rethinking bank regulation: Till angels govern*, Cambridge, MA: Cambridge University Press: 2006.

Barth James, Juan Marchetti, Daniel Nolle, and Wanvimol Sawangngoenyuang, 2007, WTO commitments vs. reported practices on foreign bank entry and regulation: A cross-country analysis.

Beck, Thorsten, Ross Levine, and Alexey Levkov, 2006, Big bad banks? The impact of U.S. branch deregulation on income distribution, NBER Working Paper 13299.

Beck, Thorsten, Asli Demirguc-Kunt, and Vojislav Maksimovic, 2003, Bank competition, financing obstacles and access to credit, World Bank Policy Research Working Paper No. 2996.

Cetorelli, Nicola and Philip E. Strahan, 2006, Finance as a barrier to entry: Bank competition and industry structure in local U.S. markets, *Journal of Finance*, Vol. 61(1), pages 437-461.

Cetorelli, Nicola, 2001, Does bank concentration lead to concentration in industrial sectors? Federal Reserve Bank of Chicago Working Paper 2001-01, April 2001.

Dell'Ariccia, Giovanni, Ezra Friedman, and Robert Marquez, 1999, Adverse selection as a barrier to entry in the banking industry, *RAND Journal of Economics*, Vol. 30, No. 3, pp. 515–534.

Carlton, Dennis W., 2004, Why barriers to entry are barriers to understanding, *The American Economic Review*, Vol. 94, No. 2, pp. 466-470.

Dvir, David and Yochai Terri, 2005, Securitization: Bringing a modern financial instrument to Israel, Koret Fellows Economic Reform Studies.

Evans, David and Richard Schmalensee, *Paying with plastic: The digital revolution in buying and borrowing*, Cambridge, MA: MIT Press, 1998.

Galor, Oded and Joseph Zeira, 1993, Income distribution and macroeconomics, Review of Economics Studies, 60, 35-52.

Goldwasser, Amit, Diana Zaks, Shahar Shlush, and Glenn Yago, Beyond Bachar: Next steps for financial reform, Koret-Milken Institute Fellows Program, Policy Brief, July 25, 2007.



Klein, Benjamin, 1993, Market power in antitrust: Economic analysis after Kodak, *Supreme Court Economic Review*, Vol. 3, (1993), pp. 43-92.

Klein, Benjamin, and Wiley, John. (2003) Competitive price discrimination as an antitrust justification for intellectual property refusals to deal, *Antitrust Law Journal*, 70: 599-642.

Mester, Loretta, 1994. Why are credit card rates sticky? Economic Theory, Vol. 4, pp. 505-30.

Parag, Noa, An assessment of the government loan fund for small and medium sized businesses in Israel, Koret Israel Economic Development Funds, Economic Reform Studies, 2006: 22–29.

Posner, Richard, Antitrust law: An economic perspective, Chicago IL: Chicago University Press 1976.

Rochet, Jean-Charles and Jean Tirole (2006) Two-sided markets: A progress report, *RAND Journal of Economics*, Vol. 35, pp. 645-667.

Schelling, Thomas. The strategy of conflict, Harvard University Press, Cambridge, MA, 1960.

Sperer, Leah, Hagar Cohen, and Liat Levy, Fair Credit Policy for Israel: Accountability and Bank Lending for Community Reinvestment, Koret-Milken Institute Fellows Program, Policy Brief, February 2008.

Stigler, George. The organization of industry. Homewood, IL: Irwin, 1968.

Stigler, George, 1964, A theory of oligopoly, Journal of Political Economy 72 (1): 44-61.

Stiglitz, Joseph and Andrew Weiss, 1981, Credit rationing in markets with imperfect information, *The American Economic Review*, Vol. 71, No. 3, pp. 393-410.

Sutton, John, Technology and market structure. Cambridge, MA: MIT Press, 1998.

U.S. Department of the Treasury, Blueprint for a modernized financial regulatory structure, March 2008.



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