Do executive compensation contracts maximize firm value?
Evidence from a quasi-natural experiment

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Abstract:
There is considerable debate on whether executive compensation contracts are a designed to maximize firm value or a result of rent extraction. The endogenous nature of executive pay contracts limits the ability of prior research to answer this question. In this study, we utilize the events surrounding a surprising and quick enactment of a new law that restricts executive pay to a binding upper limit in the insurance, investment and banking industries. This quasi-natural experiment enables clear identification. If compensation contracts are value maximizing, any outside restriction to the contract will diminish its optimality and hence should reduce firm value. In contrast to the predictions of the value maximization view of compensation contracts, we find significantly positive abnormal returns in these industries in multiple short term event windows around the passing of the law. We find that the effect is concentrated only for firms in which the restriction is binding. We find similar results using a regression discontinuity design, when we restrict our sample to firms with executive payouts that are just below and just above the law's pay limit. We also find that the increase in firm value is greater for firms with weaker corporate governance and smaller for firms that grant a greater portion of their executive compensation in the form of equity.

Keywords: Executive Compensation; Governance; Optimal contracts

JEL Classification: G30, G38, M12, M48, M52

1.   Introduction

There is considerable debate regarding executive compensation in both the public arena and academia (Frydman and Jenter, 2010). On the one hand, "value maximization" contracting theories imply that executive compensation contracts are optimally designed to compete on executive talent and incentivize the executives to maximize shareholder value (e.g., Edmans and Gabaix, 2016). On the other hand, "rent extraction" theories suggest that executive compensation contracts are set sub-optimally as the executives are able to "capture" the contract approval process and set a contract that enables them to extract rents at the expense of shareholders (Bebchuk and Fried, 2003). This debate has important implications to different literature streams in economics such as contract theory, corporate finance, corporate governance, labor economics, and income inequality. Moreover, this debate has significant policy implications given that numerous proposals to limit executive pay have been promoted both by the media and politicians.

Despite the importance of this debate, Edmans and Gabaix (2016) point out that even the basic question of whether CEO pay is causally set to maximize firm value has not been satisfactorily answered as there are significant challenges to assigning causality in this literature. Therefore, they note that the first order task in this literature is "to find good instruments for or quasi-exogenous shocks to CEO pay, to allow the identification of the effects of incentives". Doing exactly that, in this study we utilize an exogenous shock to answer this open question.

Our setting utilizes the first time (to the best of our knowledge) in which a developed economy passed a law that restricts executive pay to all firms in targeted sectors. Specifically, on March 16, 2016, the Israeli treasury committee of the Knesset (the Israeli Parliament) surprisingly

and unanimously approved a law proposal that restricts the compensation of executives.[1] As discussed in detail in section 2, if a law proposal passes the Treasury Committee with both coalition and opposition parties supporting it, the actual vote in the full Knesset is nothing more than a formality (which, as expected, occurred on March 29, 2016, without change). Therefore, the passing of the law in the treasury committee is the main event we examine. Nevertheless, for completeness, we also examine all the dates that are associated with the passing of the law.

The final version of the law, as approved by the Treasury Committee, applies only to insurance, banking, and investment corporations (including parent companies of these corporations), which we refer to hereafter as financial institutions. The law restricts total compensation (including but not limited to salaries, bonuses, share-based compensation, deferred compensation, benefits, retirement compensation) to be not higher than 35 times that of the lowest paid employee, including indirect employees such as employees of subcontractors employed indirectly by financial institutions. According to the Bank of Israel data, at least ten percent of bank employees are paid the Israeli minimum wage (approximately 72,000 ILS a year). Therefore, this restriction translates to an effective upper limit on total pay of 2.53M ILS a year. Given that the average compensation of the highest paid executives in the financial institutions subject to this law is 4.8M ILS (4.7M median), this represents a significant binding pay cut to the executives of many of the financial institutions.

The passing of the law is a unique quasi-natural experiment that allows us to examine the key differential prediction between the value maximization theories and the rent extraction theories. Under the value maximization theories, compensation contracts are optimally set to maximize firm value. Therefore, any outside restriction on these contracts, such as a limit on

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[1] For a full description of the dramatic and surprising meeting of the treasury committee see (in Hebrew) http://www.calcalist.co.il/articles/0,7340,L-3683702,00.html

executive pay, is suboptimal and should result in a reduction in firm value. In contrast, under the rent extraction theories, a limit to executive pay can reduce rent extraction which should result in an increase in firm value. As the passing of the law was surprising and exogenous to the firm, we are able to utilize a short window event study to examine how firm value changes in response to this shock in the short event window around its passing. This research design limits the possibility that unobservable factors, other than the changes induced by the law, contribute to changes in the firm value.[2] Moreover, the fact that law was binding to certain financial institutions and not to others and the fact that firms other than financial institutions were not affected by the passing of the law allow us to further reinforce our causal interpretation.

We find that financial institutions experienced statistically significant 1.58% abnormal returns in the three days surrounding the approval of the law in the Knesset Treasury Committee.[3] As the Tel Aviv 100 index (the main index for the Israeli stock market) did not change significantly during these days, the abnormal returns is driven primarily by the increase in the value of financial institutions. This significant increase in firm value is inconsistent with the value maximization optimal contracting theories and provides support to the rent extraction theories.

We provide several more tests to buttress the causal interpretation of our results. First, we show that the positive effect of the approval of the law on firm value is concentrated in the financial institutions for which the pay limit is binding. These financial institutions experienced significant abnormal returns of 1.77% compared to a significantly lower and statistically insignificant increase in the value of financial institution for which the pay limit was not binding.[4] This result further

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[2] As in most capital markets event studies, we also assume a reasonably efficient capital market, in which prices impound all available public information into prices within a few days. Prior research on the Israeli stock exchange suggests that this is a reasonable assumption in our setting as well (e.g, Amihud et al. 1997; Kalay et al. 2002).

[3] Similar inferences are obtained when we shorten the event window to two days or lengthen it to 5 days.

[4] The small insignificant positive reaction is possibly because the law limits future rent extraction even if it does not exist at the time of the law passing.

reduces the possibility that other factors affect the increase in the value of financial institutions around the event day. Second, we examine the effect of the passing of the law on financial institutions that are not within the scope of the bill and find statistically insignificant abnormal returns for this subset of firms.[5]

Second, we also examine the effect of the passing of the law on financial institutions that were just below the pay limit and financial institutions that were just above the pay limit. We find that financial institutions that were just above the limit experienced significant abnormal returns of approximately 1.30% surrounding the event window, while financial institutions that were just below the pay limit experienced statistically insignificant returns of approximately 0.53%. These results further limit the possibility of alternative interpretations of the increase in firm value. This specification mitigates the possiblity that the different return pattern we find is because financial institutions above the pay limit are materialy different from the financial institutions below the pay limit.

We continue by providing cross sectional tests that corroborate the results of our main findings. In our first cross sectional test, we find that the observed increase in firm value is greater for financial institutions with weak corporate governance. Specifically, we find that financial institutions with a proportion of independent directors below the sample median experienced higher abnormal returns around the event window than that of financial institutions with a proportion of independent directors above the sample median. Relatedly, we also find that firms with a proportion of busy directors above the sample median experienced higher abnormal returns than financial institutions with a proportion of busy directors below the sample median.[6] In our

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[5] The scope of the Bill is limited to banks, insurance firms, investment firms, mutual funds managers and ETF issuers, and their parent companies. Hence, the Bill does not affect financial firms dealing with other activities such as factoring and underwriting.

[6] Following prior literature we define busy directors as directors who serve on three or more boards.

second cross sectional test, we find that the positive abnormal returns are lower when the executive pay structure better aligns the executive interests with those of shareholders. Specifically, we find that financial institutions with a ratio of equity based compensation to total compensation that is above the sample median experienced lower abnormal returns around the event day compared to financial institutions with a ratio of equity based compensation to total compensation that is below the sample median. These results provide further support for the rent extraction theories.

For completeness, we provide three more robustness analyses that mitigate the possibility that we misclassified our primary event. First, we show that approximately 85% of the financial institutions in our sample experienced positive abnormal returns during the event window. Out of the remaining 15% which experienced negative abnormal returns, 25% were below the threshold of the law. Second, we show that all the other events that are associated with the passing of the law (e.g., preliminary vote, formal enactment) are associated with positive but insignificant abnormal returns. Third, we search and provide an analysis of all other news that came out on financial institutions in our sample during our primary event window. This analysis reveals that no other event has likely caused the positive abnormal returns we observe in the data.

Although our results are compelling and provide evidence on a causal link between executive pay and firm value that escaped the literature for years, as in many natural experiments, our findings also come with significant limitations. Our experiment occurred in a relatively small developed market and only applies to a relatively small sample of financial institutions. Therefore, it is unclear if our results can be generalized to other countries and industries.

Although these concerns are certainly valid, there are a few institutional factors that make us believe our results could be expected in other settings. First, Israel is an OECD member, a developed economy that practices common law. These countries were shown to have the strongest

governance and institutions that protect minority shareholders, enforce contracts and have strong private and public enforcement (e.g., La Porta et al., 1998; Djankov et al., 2008). Second, Israeli financial institutions have an additional layer of monitoring compared to industrial firms. Israeli banks are supervised by the Bank of Israel, and Israeli insurance companies are supervised by the Capital Market, Insurance, and Savings Supervisor in the Israeli Finance Ministry. These supervisory institutions are widely recognized as some of the best in the world. Third, Israeli financial institutions were among those who suffered the least in the 2008 financial crisis, suggesting that they are well managed and well governed. Moreover, the fact that our sample, which represents all financial institutions in Israel, is relatively small makes it more difficult for us to reject the null hypothesis of no effect of the law.

Taken together, we speculate that these factors suggest that, if anything, our findings that support the rent extraction theories for Israeli financial institutions are expected to underestimate the effect in other countries or industries. Nevertheless, we admit that the study suffers from external validity concerns. Therefore, although we believe this study contributes to the literature, we caution and encourage the reader and policy makers to compare the setting they would want to generalize our results to before drawing conclusions on their setting. Importantly, although we would have loved to have a perfect experiment to answer our research question, this one is the best available. At minimum, this experiment provides evidence for the feasibility that executive compensation contracts in a developed, common law country with a modern banking systems can be designed suboptimally.

2. Motivation and institutional details

2.1 Motivation

Executive compensation is a heavily debated subject. Since at least as early as the 1950s, the press, general public, politicians, and academic researchers have remarked on the high levels of CEO pay and questioned whether these levels are fair and appropriate (e.g., Murphy, 2002). On the other side of the debate, many believe that executive compensation is determined in a free market transaction and therefore represents an appropriate and optimal compensation.

The popular view that executive pay is excessive has led regulators all around the world to act in order to attempt to curb out executive pay. In the United States, legislators capped the tax deduction on executive pay in 1993; the Securities and Exchange Commission mandated increased the disclosure requirements on compensation in 2006; say-on-pay legislation was passed as part of Dodd-Frank in 2010, and the SEC passed a rule requiring firms to disclose the ratio of CEO pay to median employee pay. On the other side of the Atlantic, in 2013, the European Union capped bankers' bonuses at the level of their salary, or twice their salary if shareholders agree. In November 2013 Switzerland held an ultimately unsuccessful referendum to limit CEO pay to twelve times the pay of the lowest earning employee.[7]

Core and Guay (2010) argue that the popular resentment of executive compensation and the following legal actions appear to at least partly stem from a perception of growing income

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[7] Additional example in Europe include the proposal of the former French President, Francois Hollande, to cap executive pay of state-owned firms at 20 times that of the lowest paid employee. There are couple of other cases were regulations limited executive pay but these regulations are not suitable to examine a causal relation between pay and firm value. During the financial crisis of 2007-2009 limitations on executive pay were imposed. However, these limitations were partial and applicable only to financial institutions who received government support and therefore are problematic from a research design perspective. In the US, the American Recovery and Reinvestment Act limited executive compensation of firms that received financial assistance from the Troubled Asset Relief Program (for a review of the TARP limitations on executive pay see, for example, Cadman et al., 2012). In Germany, the German Financial Markets Stabilization Act (from October 2008) restricted total annual executive compensation for all firms that receive government aid from the stabilization fund to 500,000 Euro (Dittmann et al., 2011).

inequality. Frydman and Saks (2007) use the ratio of CEO pay to worker pay as a measure of income inequality noting: "A comparison of executive pay to the earnings of a typical worker provides insight into the evolution of earnings inequality at the top of the income distribution". Reproducing data from Frydman and Saks (2007), Core and Guay (2010) show that CEO pay relative to that of average worker pay has increased sharply after 1970 (from a level of about 30:1), rising to approximately 120:1 by 2000. Reproducing the Piketty and Saez (2003) data, Core and Guay (2010) show an increase in the share of income earned by the top 10% of taxpayers of about 33% during roughly the same period, suggesting a link between those trends.

The academic debate on this subject is summarized nicely in Edmans and Gabaix (2016). One side of the debate represents the rent extraction view, which claims that current compensation practices sharply contrast the predictions of traditional optimal contracting models. Thus, contracts are not chosen by boards to maximize shareholder value, but instead by the executives themselves to maximize their rents. This perspective is espoused most prominently by Bebchuk and Fried (2004). On the other hand, the value maximization view reaches a different conclusion. While it acknowledges that standard agency models are inconsistent with practice, it argues that such models do not capture the specifics of the CEO setting, since they were created as general frameworks for the principal-agent problem. For example, CEOs have a very large effect on firm value compared to rank-and-file employees. Thus, in a competitive labor market, it may be optimal to pay high wages to attract talented CEOs and to incentivize them to extract high effort even though doing so requires paying a premium. These models aim to capture the specifics of the CEO employment relationship, and can indeed generate predictions consistent with the data. Under this perspective, regulation will do more harm than good. This perspective is most prominently modeled in Gabaix and Landier (2008).

The case of Israel is no different than the trend observed around the world and exemplifies the issues discussed above. A rise in inequality in Israel influenced a populist move to curb out executive pay. Politicians strongly argued that executives earn too much at the expense of employees and consumers. This rise in popular sentiment and political climate led the Israeli parliament to take action and legislate a law that is aimed to curb out executive pay in financial institutions. The first draft of the bill, which was approved in two preliminary votes in the Knesset, introduced a tax deduction cap which is very similar to the ineffective deduction cap used in other countries. However, in a surprise move, the Treasury Committee of the Knesset introduced and passed a revised version of the bill that limits executive pay. We discuss the details of the passing of the law in the following section. The Israeli banking industry and even some commentators in the media have argued that the law went too far and will cause "brain drain" of talent in the banking industry.[8]

More importantly for us, the surprising nature of the passing of the law gives us a unique opportunity. The major limitation of examining the different views on executive compensation is that executive compensation is endogenously determined. Therefore, any cross-sectional or time-series examination of the relation between executive pay and firm value suffers from numerous limitations. Hence, the first order question in this literature on whether executive pay is set to maximize firm value is still largely unanswered (Edmans and Gabaix, 2016). The passing of the bill is an exogenous shock to banks' executive compensation contracts and therefore allows us to overcome many of the challenges in prior research.

2.2. Institutional details

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[8] As a matter of fact, several senior financial institutions' executives in Israel resigned after the enactment of the law, citing the law as the primary cause.

Laws in Israel get approved following a preliminary vote in the Knesset, discussions and a vote in the relevant Knesset's parliamentary committee, and two additional votes in the Israeli Knesset. The preliminary vote serves as an initial screening to bills. A bill that receives a majority in the preliminary vote is then directed to one of the Knesset committees, where it gets discussed and prepared for the second and third votes in the Knesset.

The preliminary vote on the "executive compensation in financial institutions" bill in the Israeli Knesset occurred on July 28, 2014. We term this vote "Event 1". The initial draft of the bill stated that executive compensation exceeding 3.5 million NIS (0.9 million USD) would not be tax deductible for financial institutions. The bill was approved in the preliminary vote with a majority of 24 in favor to 0 against. A tax deduction cap on executive pay exists in several countries, including the United States, and was shown to be generally ineffective both from a regulation perspective and a research design perspective as firms usually bear the tax consequences of the regulation or are able to avoid them all together (e.g., Murphy, 2012).[9]

Following the disbandment of the 19th Knesset on December 3, 2014, and the subsequent elections, the bill was reintroduced with no significant changes on May 4, 2015, by two other members of Knesset. Subsequently, the bill was approved in another preliminary vote on November 9, 2015, with 25 votes in favor and 0 against. We term the bill re-initiation "Event 2" and the second preliminary vote "Event 3". On January 4, 2016, the Knesset's Treasury Committee had the first discussion on the bill. We term this discussion "Event 4". The material issues discussed in the meeting included some committee members advocating to (1) broaden the scope of the bill to all public companies, not just financial institutions; and (2) lower the threshold of the

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[9] For a recent example of the ineffectiveness of the tax cap see https://www.propublica.org/article/remember-that-ceo-pay-cap-even-less-effective-than-we-knew

tax deductibility of executive compensation. On February 15, 2016, the Knesset's Treasury Committee reconvened to discuss the bill again. We term this discussion "Event 5". The material issues discussed in the meeting included some committee members advocating to (1) broaden the scope of the bill to all public companies, not just financial institutions; (2) impose the tax burden on the excess executive compensation on the receiving executive rather than the awarding firm; and (3) lower the threshold of the tax deductibility of executive compensation to 2.5 million NIS (0.7 million USD) or even to 0.8 million NIS (0.2 million USD). The meeting adjourned without any agreements among the committee members.

On March 16, 2016, the Knesset's Treasury Committee reconvened for a final discussion and a vote on the bill. We term this discussion and vote "Event 6". In this meeting, the committee surprisingly introduced and approved a pay limit for the first time. During the discussions, all member of the committee agreed on a more restrictive bill. Most importantly, instead of a 3.5 million NIS (0.9 million USD) tax deduction cap, the committee agreed on a threshold set to be 35 times the salary of the lowest paid employee at the firm as a binding pay limit. This implies that firms cannot compensate an executive at a value that exceeds 35 times the salary of the lowest paid employee at the firm. Firm employees include both direct employees and personnel employed indirectly through outsourcing companies. In addition, if the firm is part of a business group, such as a holding company, or belongs to a group of companies with a joint major shareholder, the compensation cap of the law applies to the compensation from all the companies that belong to the business group. The minimum annual wage in Israel is set to 72,000 ILS (18,947 USD), which implies an effective executive compensation threshold of 2.5 million NIS (0.66 million USD). The compensation under the bill consists of both monetary and non-monetary components, including salaries, bonuses, share-based compensation, deferred compensation, benefits and retirement

compensation. In addition, executive compensation that is below 35 times the salary of the lowest paid employee but in excess of 2.5 million NIS (0.66 million USD) requires the approval of (1) the compensation committee, (2) board of directors, (3) majority of independent directors, and (4) the shareholders at the annual shareholders' meeting. However, the committee decided to limit the scope of the bill to financial institutions, as previously proposed. It is important to note that if a bill is approved with unanimous support in the Treasury Committee by all coalition and opposition members, the official vote on the law by all members of the Knesset is nothing more than a formality. Because of the surprising nature of this event and the complete support of the law, which sealed its passing, this event serves as our primary event.

As discussed above, given the unanimous support of the bill in the treasury committee by all coalition and opposition members, the bill approval by the Knesset for a second and third and final vote on March 29, 2016, was only a formality. We term this vote "Event 7". The bill received unanimous support with no amendments on both votes, with 56 votes in favor and 0 against. The effective date of the bill is January 1, 2017.

3. Research design:

We employ an event study methodology to test the market reaction to the main event (the unanimous vote in the treasury committee on setting the executive compensation cap at financial institutions to 35 times the salary of the lowest paid employee, i.e., event 6). Since the events are clustered in their effect on institutions, we expect the error terms to be correlated across firms. Therefore, following prior literature, we aggregate all financial institutions into one portfolio. Using this portfolio, we estimate the following model:

$$R_{p,t} = \alpha + \beta R_{m,t} + \gamma D_t + \varepsilon_t \tag{1}$$

where $R_{p,t}$ is the equal-weighted portfolio returns on day t. We use a total of 432 trading days, beginning 10 trading days before event 1 (i.e., the preliminary vote on July 28, 2014) and ending 10 trading days after the last event (i.e., the passage of the bill on the second and third votes on March, 29, 2016 or event 7). $R_{m,t}$ is the Tel-Aviv 100 index return on day t. The Tel-Aviv 100 index is the weighted index of the largest 100 firms on the Tel-Aviv stock exchange based on market capitalization.[10] The total market capitalization of firms represented on the index is approximately 189.61 billion USD, compared to a total market capitalization of 23.28 billion of all institutions in our sample, and compared to a market capitalization of 201.682 billion USD, which represents the total for all firms publically traded on the Tel-Aviv stock exchange.

D_t is an indicator variable equal to 1 on any one of the three days surrounding *Event 6* and 0 otherwise. The coefficient on D_t is our coefficient of interest. A negative coefficient on D_t supports the value maximization optimal contracting theories while a positive coefficient on D_t supports the rent extraction theories. Lastly, ε_t is the error term. Following prior literature, we employ two different specifications for the standard errors: (1) Huber-White, and (2) unadjusted.

4.   Sample selection and data

The tests in the study are limited to financial institutions that fall under the scope of the executive compensation law. We identified a total of 20 financial institutions that are publicly traded on the Tel-Aviv Stock Exchange (TASE) and were impacted by the law. Eight of the institutions are classified as banks, and seven institutions are classified as insurance companies. Additional four institutions are classified as investment firms, and lastly, one of the institutions is a holding company of an insurance company. Industry classification and returns data are obtained

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[10] On February 2017, the Israeli stock exchange revised its indexes, and the TA-100 became TA-125.

from the TASE website. We obtain executive compensation data from the annual reports of the financial institutions. These reports provide information on the five highest paid executives in the financial institution. These reports also provide information on directors for our additional corporate governance analysis.

As discussed above, we employ an event study methodology, and since the events related to the passage of the bill are expected to affect all financial institutions, we create daily portfolios of all publicly traded financial institutions. Our sample period spans from July 15, 2014, to April 12, 2016. Consequently, our sample size in all the analyses is 432 days (representing each trading day in our sample).

Table 1 provides the descriptive statistics for the institutions represented in our sample. The median maximum total compensation is 4.8 million ILS (1.2 million USD). The 25th percentile of maximum total compensation is 3.3 million ILS (0.875 million USD), which implies that more than 75% of the institutions in our sample will be required by law to lower the maximum executive compensation they award in 2017. The mean market capitalization of financial institutions in our sample is 4.5 billion ILS (1.1 billion USD), compared to a mean of 3.4 million ILS (0.9 million USD) for all firms traded on the TASE. The average market-to-book ratio is 1.128, consistent with the low market-to-book ratios of financial institutions observed in the US. The average proportion of independent directors is 0.308, lower than average observed in the US. The mean proportion of busy directors is 0.518, consistent with the results observed by Fish and Shivdasani (2006) for US firms. Lastly, mean equity-pay to total-pay ratio in our sample is fairly small, merely 0.084, with a median of 0. This implies that compensation consists mostly of cash and other short-term components.

5.   Results

5.1 Main results

The main results for the market reaction to the unanimous vote in the treasury committee that took place on March 16, 2016 (event 6) are presented in Table 2. For brevity, we discuss only the results with the Huber-White standard errors (column 1). The mean equal-weighted returns around the three days surrounding the event, and after controlling for the market portfolio, is equal to 0.528 (t-statistic = 2.09). This implies that the share value of financial institutions increased by a total of 1.584% (0.528*3 = 1.584, which translates to 133% annualized returns) in the three days surrounding the unanimous vote in the treasury committee.[11] Although 1.584% is an economically significant abnormal return it is not too large to be unfeasible as, at maximum, it should be equal to the present value of excess compensation payments to perpetuity.[12] We present Figure 1 to depict the results visually. The solid line in Figure 1 depicts the cumulative adjusted returns (firm returns minus market returns) around the event date for all financial institutions in our sample.

Overall, the results in Table 2 suggest that investors view the legislation to effectively limit executive compensation in financial institutions to be value increasing. This suggests that executive compensation in institutions in Israel is more associated with rent extraction than value maximization.

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[11] Similar inferences are obtained in a sample limited to banks and in a sample limited to insurance companies.

[12] One conceptual way to assess the ball park of the theoretical magnitude of the average increase in firm value is to compare the increase in the market value of each of the financial institutions to the discounted expected savings in pay for perpetuity. There are numerous significant challenges with implementing this exercise, such as estimating the expected excess pay and the effects the cut in pay will have on lower rank employee compensation. Although we attempted this exercise and the results suggest that our ball park estimate of the discounted pay savings is comparable to the increase in firm value under our brave assumptions, we do not discuss nor tabulate these results as we feel that this exercise is highly speculative. We simply point out to the reader that such an attempt was preformed but it is too speculative to report.

5.2 Additional primary tests

We perform further tests to enhance the causal interpretation of our results. In Table 3 we partition the sample of institutions based on the expected impact of the legislation on them and examine the market reaction to the main event (Event 6). To the extent that the executive compensation limits are value increasing for shareholders, we expect institutions that award executive compensation above the new legislative limit to experience a more positive market reaction compared to institutions awarding executive compensation that is below the new legislative limit, and compared to financial institutions that are not within the scope of the compensation restriction.

We present the results from estimating Eq. (1) for institutions with maximum executive compensation above 2.5 million NIS (0.66 million USD) in Panel A. Since the results are similar across both specifications, for brevity, we narrate the results in column 1 only. The average abnormal returns in the three days surrounding the main event is 0.590 (t-statistic = 2.18). This implies that the value of institutions awarding executive compensation above 2.5 million NIS (0.66 million USD) increased by 1.77% (0.590%*3) in the three days surrounding the main event, after controlling for the market returns. The dotted line in Figure 1 depicts the cumulative adjusted returns around the event date for the financial institutions that are above the law's limit.

In Table 3 Panel B we present the results from estimating Eq. (1) for institutions with maximum executive compensation below 2.5 million NIS (0.66 million USD). Since the results are similar across both specifications, for brevity we narrate the results in column 1. As expected, the market reaction for firms that award executive compensation below the legislative limit is significantly smaller and statistically insignificant. The average increase in firm value in the three days surrounding the main event is 0.176 (t-statistic = 0.39). This implies that the value of

institutions awarding executive compensation below 2.5 million NIS (0.66 million USD) increased by 0.528% (0.176%*3) in the three days surrounding the main event, significantly lower than the increase in the value of firms awarding executive compensation above 2.5 million ILS (0.66 million USD). The dashed line in Figure 1 depicts the cumulative adjusted returns around the event date for financial institutions that award executive pay below the law's limit.

We present the results for nine financial institutions that are not in the scope of the law in Table 3 Panel C. Since those financial institutions are not within the scope of the law, we do not expect to find a significant market reaction around the main event. We indeed find a statistically insignificant increase in the value of the portfolio consisting of those firms of 0.316 (t-statistic = 0.97), and is.

In Table 4 we present the results from estimating Eq. (1) for a subset of financial institutions awarding executive compensation immediately above and below the 2.5 million NIS (0.66 million USD) executive compensation threshold. We implement this approach to facilitate a better-identified research design. In Panel A we present the results for a subset of 4 institutions awarding executive compensation above 2.5 million ILS (0.66 million USD) and below 4 million ILS (1.05 million USD). The results show a positive and significant market reaction to the unanimous vote for the approval of the bill in its restrictive form in the treasury committee. The average daily abnormal returns in the three days surrounding the main event are 0.434 (t-statistic = 4.17), which implies an average increase in the abnormal value of 1.302% (0.434%*3) in the three days surrounding the event. The positive reaction is smaller than the reaction for all institutions awarding executive compensation above 2.5 million NIS (0.66 million USD), which is presented in Table 3 Panel A, where the average daily abnormal returns in the three days surrounding the main event are 0.590 (*t*-statistic = 2.18). This provides further support that the

greater the impact of the executive compensation cap, the more favorably the market reacts to the main event.

In Table 4 Panel B we present the results for a portfolio consisting of a subset of 3 financial institutions awarding executive compensation below 2.5 million ILS (0.66 million USD) and above 1 million ILS (0.26 million USD).[13] The results show no significant market reaction to the main event. Average daily abnormal returns in the three days surrounding the unanimous vote for the approval of the bill in its restrictive form in the treasury committee are 0.176 (t-statistic = 0.39). Since the current highest executive compensation in the three firms in this subsample is below the cap set by the law, the results are consistent with investors not expecting to see a further decrease in executive compensation in those firms. Overall, the results in Table 4 are consistent with investors' belief that the current prevailing executive compensation in financial institutions in Israel is a form of rent extraction, and firm value increases in response to the legislative limitation of the rent extraction.

5.3 Cross sectional tests

We preform two sets of cross sectional tests to corroborate our primary finding. In our first set of cross sectional test, we build on prior studies that document that weak corporate governance is associated with management rent extraction (Core et al. 1999). Therefore, if the reduction of rent extraction is the reason of the observed positive abnormal returns around the main event date, then the positive market reaction following this legislation is likely to be stronger for institutions

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[13] This subset of firms is identical to the one in Table 3 Panel B, but we repeat the analysis here for the ease of the reader.

with weaker corporate governance. We examine two corporate governance characteristics: board independence and board busyness.

We present the results from estimating Eq. (1) for financial institutions with a proportion of independent directors below (above) the sample median in Table 5 Panel A. We find that the market reaction for financial institutions with low board independence is economically and statistically significant. The coefficient estimate is 0.546 (representing 1.65% abnormal return in the three-days surrounding the main event) and the t-statistic is equal to 2.66 in column 1. Conversely, we find statistically insignificant results for firms with strong board independence. The coefficient estimate is 0.511 and the t-statistic is equal to 1.46.

We examine the market reaction of the legislation for firms with low (high) board busyness in Table 5 Panel B. We find that there is a stronger market reaction for firms with busy boards. The three-day abnormal returns surrounding the main event are 2.181% (0.727%*3, t-statistic = 3.10) for firms with busy boards. Conversely, the 3-day abnormal returns for financial institutions with a proportion of busy boards below the population's median is statistically insignificant (coefficient estimate = 0.330; t-statistic = 0.94). Overall, the results from the cross sectional tests that exploit corporate governance characteristic are consistent with the predictions of rent extraction theories of executive pay.

In our second set of cross sectional tests we examine the effect of the existing executive pay structure on the observed positive abnormal returns around the main event date. Prior literature shows that equity-based pay better aligns the incentives of the management with the objectives of shareholders. Therefore, rent extraction is less likely when executives are paid with equity. We present the results in Table 6. We find that the positive market reaction to the new legislation is stronger among firms with an equity to total-pay ratio below the sample median. The three-day

abnormal returns are 2.013% (0.671%*3; t-statistic = 2.93). In contrast, the three-day abnormal returns for firms with high equity to total-pay ratio is 0.792% (0.264%*3) and is statistically insignificant (t-statistic = 0.88). Again, these results are consistent with the predictions of rent extraction theories of executive pay.

5.4 Further robustness analysis

In this section, we present further analysis to enhance our comfort that we are capturing the correct event in our main tests. First, in Table 7 we present the cumulative three day abnormal returns for each of the financial institutions in our sample around event 6. Table 7 Panel A reveals that out of the 17 financial institutions that were affected by the law, 14 had a positive CAR for this event period and three had a small negative CAR.[14] For comparison, the Tel Aviv 100 index had a small negative CAR of -0.168% during the event period. Table 7 Panel B reveals that out of the three financial institutions that are below the threshold, one had a negative CAR and 2 had a positive CAR that is much smaller than the sample mean. The findings in Table 7 provide comfort that our results are not likely driven by a small subset of financial institutions or by the error structure of the data.

Second, in Table 8 we present the results from estimating Eq. (1) for all other events related to the executive compensation law. For brevity, we only narrate the results in column 1, since the results are similar across both specifications. The first variable of interest is Event 1, which represents the average abnormal returns in the three days surrounding the preliminary vote on the bill. The bill at that point imposed the restriction that executive compensation of above 3.5 million NIS (0.92 million USD) will not be tax deductible for the awarding firm. The market reaction to

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[14] One of the financial institutions with a negative CAR in this sample, Ayalon, had only one tiny trade during the event period that resulted in its small negative CAR.

the first event is marginal both economically and statistically, with average abnormal returns of 0.195 (t-statistic = 1.69). The results for Event 2 yield a similar insignificant market reaction, possibly because the executive compensation restrictions imposed by the bill did not alter significantly in that period. We find a marginally positive market reaction around Event 4, the first discussion of the bill in the Knesset's Treasury Committee. The positive market reaction could be a result of investors updating the expectations given the unanimous support for action to restrict executive pay. We find a positive market reaction around our main event, Event 6, consistent with our previous findings (coefficient estimate = 0.538, t-statistic = 2.11). The market reaction to Event 7, the unanimous final for the approval of the bill in the Knesset is marginally significant economically and statistically insignificant. Specifically, the average increase in firm value in the three days surrounding event 7 is 0.261 (t-statistic = 1.04). This is consistent with investors incorporating the news into firms' price following the main event, the unanimous vote for the approval of the bill in the treasury committee.

Third, to ensure that our results are not driven by a confounding event, we actively search for other news events related to the affected financial institutions that occurred in the three days surrounding the main event. The outcome of this analysis is presented in Table 9. We searched for filings made by our sample firms in the three days surrounding our main event. Two firms issued the annual report in that window—Bituach Yashir and Meitav. The average market reaction of both of those firms in the three-day event widows is below the overall average for all firms in our sample. Therefore, we do not believe that the release of the annual reports by those firms is driving our results.

We also searched on Google for the word "banks" in Hebrew with a date restriction of 03/14/2016–03/18/2016. Our assumption is that any significant news related to the banking

industry would appear in our search. We identified a few relevant articles that are unrelated to the main events. The first article is about banks in Israel being stable but inefficient.[15] It is not clear whether this article should induce positive returns. In addition, our sample includes insurance companies, not just banks. A second article states that Deutsche Bank closed is trading division in Israel.[16] Again, this article is limited to banks, and it is not clear whether such news should result in a positive or a negative market reaction.

In addition, we searched for all articles (not limited to any specific term) in the Israeli financial website *The Marker* with a date restriction of 03/14/2016 – 03/18/2016. We identified an article on the increased competition in the pension management industry, which would suggest negative returns.[17] We also identified an article which details the executive compensation in 2015 based on firms' annual disclosure.[18] This article is a summary of firm specific disclosures that were already released to the market. Lastly, we identified an article claiming that the two leading banks in Israel (Poalim and Leumi) may be able to issue credit cards but not to their clients. This is a part of discussions by regulators to require banks to sell-off their credit card businesses. Since our sample is not restricted to these two banks, we do not believe that this event is driving our results.[19]

6.   Summary and conclusions

In this study, we examine the optimality of executive compensation contracts. There is considerable debate regarding executive compensation in both the public arena and academia. On

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[15] http://www.ynet.co.il/articles/0,7340,L-4780179,00.html
[16] http://www.calcalist.co.il/markets/articles/0,7340,L-3683645,00.html
[17] http://www.themarker.com/news/1.2885575
[18] http://www.themarker.com/markets/reports/1.2883434
[19] http://www.themarker.com/markets/1.2881721

the one hand, "value maximization" contracting theories imply that executive compensation contracts are optimally designed to compete on executive talent and incentivize the executives to maximize shareholder value. On the other hand, "rent extraction" theories suggest that executive compensation contracts are set sub-optimally, as the executives are able to "capture" the contract approval process and set a contract that enables them to extract rents at the expense of shareholders.

We utilize a quasi-natural experiment that allows to test the key differential prediction between the value maximization theories and the rent extraction theories. In 2016, the Israeli Parliament has surprisingly passed a law that limits executive pay in financial institutions. Under the value maximization theories, this intervention should result in a reduction in firm value while under the rent extraction theories, this intervention should result in an increase in firm value. We find significant positive abnormal returns for financial institutions around the passing of the law. We also find that the positive abnormal returns are significantly larger for financial institutions for which the pay limit is binding. We further find that the financial institutions which had executive pay just above the pay limit threshold experienced much larger abnormal returns than financial institutions that were just below the pay limit threshold. These results support the rent extraction view of executive compensation. Lastly, we find that the positive market reaction is greater for financial institutions with weaker governance and for financial institutions that that award a lower proportion of equity-based pay.

Our results carry implications to different literature streams in economics such as contract theory, corporate finance, corporate governance, labor economics, and income inequality. Moreover, this debate has significant policy implications given that numerous proposals to limit executive pay have been promoted both by the media and politicians. Nevertheless, we caution the reader to carefully extrapolate our results to other settings.

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Figure 1: Cumulative Adjusted Returns (CAR) around the main event date

The figure plots the cumulative adjusted returns (CAR) of an equally-weighted portfolio consist of the sample firms. Time 0 is the approval of the executive compensation cap bill at the Treasury committee (Event 6). Adjusted return is the equally-weighted portfolio return minus the TA-100 index return, which is the main index for the Israeli stock market.
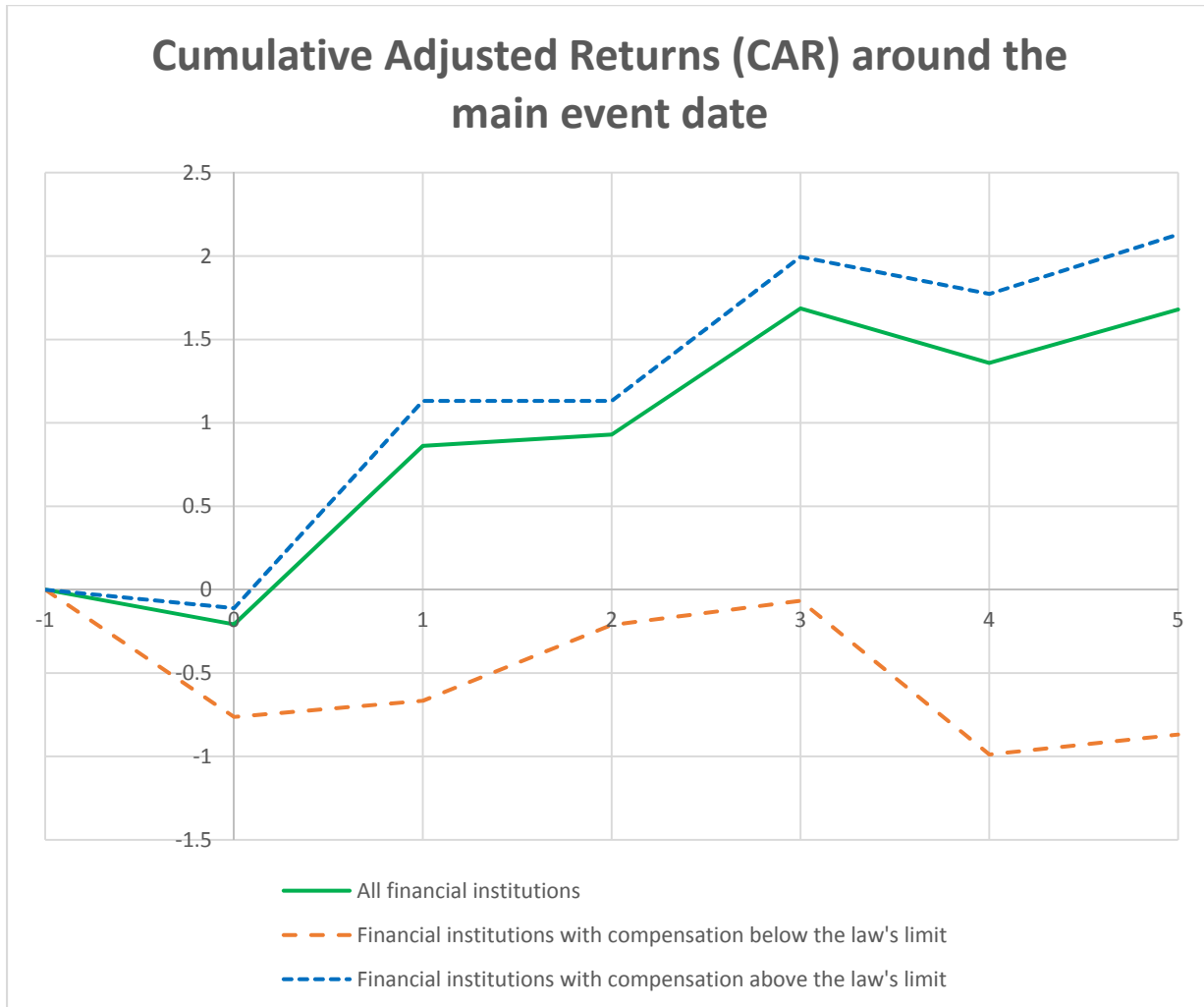

Cumulative Adjusted Returns (CAR) around the main event date

Legend:
— All financial institutions
- - - Financial institutions with compensation below the law's limit
---- Financial institutions with compensation above the law's limit

Table 1: Descriptive Statistics

The table reports descriptive statistics of the sample of the 20 financial corporations that were traded on the Tel-Aviv Stock Exchange (TASE) during the legislation process of the executive compensation cap Law. *Max total compensation* is the compensation of the firm's top-paid executive on 2015. *Market Cap* is the firm's market value of equity on December 31, 2015. *Total Assets* is the firm's total assets at the end of 2015. *Gross Revenues* are the firm's annual revenues on 2015. *ROA* is return on assets, calculated as net income in 2015 over average total assets in the same year. *ROE* is return on equity, calculated as net income, scaled by average total shareholders' equity in 2015. *Market to Book* is the ratio between market value of equity and book value of equity at the end of 2015. *P/E ratio* is the ratio between share price and earnings per share in 2015. *Proportion of independent directors* is the fraction of directors considered independent under the Israeli Companies Act. *Proportion of busy directors* is the fraction of directors serving on three or more boards. *Equity-pay to total-pay ratio* is the ratio of share-based compensation and total compensation for the firm's highest-paid executive in 2015.

	N	Mean	Std Dev	P25	P50	P75
Max total compensation (ILS, 000's)	20	4,766	2,165	3,250	4,738	6,621
Market Cap (ILS, millions)	20	4,534	7,024	620	2,140	3,901
Total Assets (ILS, millions)	20	98,199	129,134	8,825	43,052	125,909
Gross Revenues (ILS, millions)	20	5,981	5,968	643	3,088	11,900
ROA (%)	20	2.150	4.909	0.348	0.510	1.669
ROE (%)	20	10.991	9.091	6.236	6.872	10.441
Market to Book	20	1.128	1.216	0.601	0.714	0.903
P/E ratio	20	10.832	6.362	7.365	9.125	11.403
Proportion of independent directors	20	0.308	0.110	0.250	0.300	0.333
Proportion of busy directors	20	0.518	0.226	0.300	0.570	0.643
Equity-pay to total-pay ratio	20	0.084	0.132	0.000	0.000	0.1993

Table 2: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016)

The table presents the coefficients of Equation (1), which measures the abnormal return at the approval of the executive compensation cap bill at the Treasury committee (Event 6). The firm sample is defined in Table 1. The sample period is from July 15, 2014 to April 12, 2016 (432 trading days). The dependent variable is the return of an equally-weighted portfolio consist of the sample firms. *TA-100 index* is the return of the Tel-Aviv 100 index, the main index for the Israeli stock market. The *unanimous vote in the treasury committee* is measured using an indicator variable that equals 1 on the three days surrounding the approval of the bill at the Treasury committee (Event 6) and 0 otherwise. In Regression (1) the standard errors are adjusted using Huber-White.

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	0.003	0.003
	(0.12)	(0.12)
Unanimous vote in the treasury committee for the approval of the bill	0.528**	0.528*
	(2.09)	(1.89)
TA-100 Index	0.737***	0.737***
	(18.18)	(25.20)
Standard Errors	Huber-White	None
# of Firms	20	20
Observations	432	432
Adjusted R-squared	0.596	0.596

Table 3 Panel A: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions with top executive compensation that exceeds the bill's compensation threshold (2.5M NIS)

The table presents the coefficients of Equation (1), which measures the abnormal return at the approval of the executive compensation cap bill at the Treasury committee (Event 6). The sample of firms is defined in Table 1. The sample period is defined in Table 2. The dependent variable is the return of an equally-weighted portfolio consist of the sample firms. *TA-100 index* and the *unanimous vote in the treasury committee* are defined in Table 2. Panel A (Panel B) examines the reaction of the portfolio of financial firms with top executive compensation that exceeds (below) the bill's compensation threshold (2.5M NIS). Panel C examines the reaction of the portfolio of financial firms that are not subject to the executive compensation cap bill. In Regression (1) of all Panels A, B, and C standard errors are adjusted using Huber-White.

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	-0.005	-0.005
	(-0.18)	(-0.18)
Unanimous vote in the treasury committee for the approval of the bill	0.590**	0.590*
	(2.18)	(1.97)
TA-100 Index	0.786***	0.786***
	(19.58)	(25.00)
Standard Errors	Huber-White	None
# of Firms	17	17
Observations	432	432
Adjusted R-squared	0.592	0.592

Table 3 Panel B: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions with top executive compensation below the bill's compensation threshold (2.5M NIS)

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	0.045	0.045
	(1.06)	(1.06)
Unanimous vote in the treasury committee for the approval of the bill	0.176	0.176
	(0.39)	(0.35)
TA-100 Index	0.463***	0.463***
	(5.97)	(8.71)
Standard Errors	Huber-White	None
# of Firms	3	3
Observations	432	432
Adjusted R-squared	0.146	0.146

Table 3 Panel C: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) for financial institutions excluded from the bill

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	0.003	0.003
	(0.12)	(0.12)
Unanimous vote in the treasury committee for the approval of the bill	0.316	0.316
	(0.97)	(0.32)
TA-100 Index	0.505***	0.505***
	(4.80)	(4.88)
Standard Errors	Huber-White	None
# of Firms	9	9
Observations	432	432
Adjusted R-squared	0.048	0.048

Table 4 Panel A: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions with top executive compensation that exceeds the bill's compensation threshold (2.5M NIS) but below 4 million NIS.

The table presents the coefficients of Equation (1), which measures the abnormal return at the approval of the executive compensation cap bill at the Treasury committee (Event 6). The sample of firms is defined in Table 1. The sample period is defined in Table 2. The dependent variable is the return of an equally-weighted portfolio consist of the sample firms. *TA-100 index* and the *unanimous vote in the treasury committee* are defined in Table 2. Panel A examines the reaction of the portfolio of financial firms with top executive compensation that exceeds the bill's compensation threshold (2.5M NIS) but below 4 million NIS. Panel B examines the reaction of the portfolio of financial firms with top executive compensation below the bill's compensation threshold (2.5M NIS) but above 1 million NIS. In Regression (1) of Panels A and B standard errors are adjusted using Huber-White.

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	-0.052*	-0.052*
	(-1.65)	(-1.65)
Unanimous vote in the treasury committee for the approval of the bill	0.434***	0.434
	(4.17)	(1.15)
TA-100 Index	0.699***	0.699***
	(13.63)	(17.70)
Standard Errors	Huber-White	None
# of Firms	4	4
Observations	432	432
Adjusted R-squared	0.420	0.420

Table 4 Panel B: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions with top executive compensation below the bill's compensation threshold (2.5M NIS) but above 1 million NIS.

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	0.045	0.045
	(1.06)	(1.06)
Unanimous vote in the treasury committee for the approval of the bill	0.176	0.176
	(0.39)	(0.35)
TA-100 Index	0.463***	0.463***
	(5.97)	(8.71)
Standard Errors	Huber-White	None
# of Firms	3	3
Observations	432	432
Adjusted R-squared	0.146	0.146

Table 5 Panel A: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions for financial firms with a proportion of independent directors below (above) the population's median

The table presents the coefficients of Equation (1), which measures the abnormal return at the approval of the executive compensation cap bill at the Treasury committee (Event 6). The sample of firms is defined in Table 1. The sample period is defined in Table 2. The dependent variable is the return of an equally-weighted portfolio consist of the sample firms. *TA-100 index* and the *unanimous vote in the treasury committee* are defined in Table 2. In Panel A the sample is divided into two using the proportion of independent directors above and below its sample median. In Panel B the sample is divided into two by the proportion of busy directors above and below its sample median. In Regressions (1) and (3) of Panels A and B standard errors are adjusted using Huber-White.

	(1)	(2)	(3)	(4)
Sample: % of independent directors	< Median	< Median	> Median	> Median
Dependent Variable:	Portfolio Returns	Portfolio Returns	Portfolio Returns	Portfolio Returns
Intercept	0.024	0.024	-0.019	-0.019
	(1.00)	(1.00)	(-0.64)	(-0.64)
Unanimous vote in the treasury committee for the approval of the bill	0.546***	0.546*	0.511	0.511
	(2.66)	(1.87)	(1.46)	(1.46)
TA-100 Index	0.732***	0.732***	0.742***	0.742***
	(17.38)	(23.97)	(16.17)	(20.26)
Standard Errors	Huber-White	None	Huber-White	None
# of Firms	10	10	10	10
Observations	432	432	432	432
Adjusted R-squared	0.571	0.571	0.487	0.487

Table 5 Panel B: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions for financial firms with a proportion of busy directors below (above) the population's median

	(1) < Median Portfolio Returns	(2) < Median Portfolio Returns	(3) > Median Portfolio Returns	(4) > Median Portfolio Returns
Sample: Proportion of busy directors				
Dependent Variable:				
Intercept	0.009	0.009	-0.003	-0.003
	(0.32)	(0.32)	(-0.11)	(-0.11)
Unanimous vote in the treasury committee for the approval of the bill	0.330	0.330	0.727***	0.727**
	(0.94)	(1.02)	(3.10)	(2.29)
TA-100 Index	0.627***	0.627***	0.847***	0.847***
	(13.40)	(18.41)	(20.12)	(25.49)
Standard Errors	Huber-White	None	Huber-White	None
# of Firms	10	10	10	10
Observations	432	432	432	432
Adjusted R-squared	0.439	0.439	0.602	0.602

Table 6: Abnormal returns at the approval of the bill by the Treasury Committee (March 16, 2016) of financial institutions and the awarding of equity-based pay

The table presents the coefficients of Equation (1), which measures the abnormal return at the approval of the executive compensation cap bill at the Treasury committee (Event 6). The sample of firms is defined in Table 1. The sample is divided into two by the proportion of equity based-compensation (out of total pay) above and below its sample median. The sample period is defined in Table 2. The dependent variable is the return of an equally-weighted portfolio consist of the sample firms. *TA-100 index* and the *unanimous vote in the treasury committee* are defined in Table 2. In Regressions (1) and (3) standard errors are adjusted using Huber-White.

	(1)	(2)	(3)	(4)
Sample: Equity-pay to total-pay ratio	< Median	< Median	> Median	> Median
Dependent Variable:	Portfolio Returns	Portfolio Returns	Portfolio Returns	Portfolio Returns
Intercept	-0.014	-0.014	0.034	0.034
	(-0.52)	(-0.52)	(1.23)	(1.24)
Unanimous vote in the treasury committee for the approval of the bill	0.671***	0.671**	0.264	0.264
	(2.93)	(2.08)	(0.88)	(0.80)
TA-100 Index	0.737***	0.737***	0.737***	0.737***
	(16.60)	(21.83)	(16.54)	(21.28)
Standard Errors	Huber-White	None	Huber-White	None
# of Firms	13	13	7	7
Observations	432	432	432	432
Adjusted R-squared	0.525	0.525	0.511	0.511

Table 7: 3-day CAR around the main event, by financial firm

The table presents the coefficients of Equation (1), which measures the abnormal return at the approval of the executive compensation cap bill at the Treasury committee (Event 6) for each of the financial firms of the sample (defined in Table 1). The sample period is defined in Table 2. The *3-day CAR* is the cumulative abnormal return for each of the financial firms, measured by an indicator variable equal to 1 on the three days surrounding the approval of the bill at the Treasury committee (Event 6) and 0 otherwise. Panel A (Panel B) reports the 3-day CAR of each of the firms with executive compensation above (below) the bill's compensation threshold (2.5M NIS).

Panel A: Firms with executive compensation above the laws limit (2.5M ILS):

	Firm	3-Day CAR
1	Ayalon	-0.006
2	Beinleumi	1.689
3	Bituach Yashir	1.329
4	Clal	1.326
5	Discount	1.728
6	Harel	5.712
7	IBI Investments	0.216
8	IDI	-0.504
9	Igud	3.993
10	Leader	1.191
11	Leumi	3.474
12	Meitav	-0.507
13	Menorah	2.403
14	Migdal	1.509
15	Mizrahi	0.546
16	Phoenix	4.656
17	Poalim	1.347

Average 3-Day CAR: 1.771% (t-statistic = 4.11)

Positive: 14

Negative: 3

Tel-Aviv 100 Index 3-day returns: -0.168

Panel B: Firms with executive compensation below the laws limit (2.5M ILS):

	Firm	3-Day CAR
1	Analyst	-0.150
2	Dexia	0.762
3	Jerusalem	0.978

Average 3-Day CAR: 0.530% (t-statistic = 1.53)

Table 8: Abnormal returns at other events related to the bill

The table presents the CAR results of Equation (1), which measures the abnormal return for the main legislation events of the executive compensation cap bill. The sample of firms is defined in Table 1. The sample period is defined in Table 2. Event 1 is the preliminary vote on the bill. Event 2 is the vote on the initiation of the bill. Event 3 is the initiation vote of the bill in the Knesset. Event 4 and 5 are the first and second discussions of the bill in the treasury committee, respectively. Event 6 is the unanimous vote for the approval of the bill in the treasury committee. Event 7 is the vote for the approval of the bill in the Knesset. The CAR standard errors of specification (1) are adjusted using Huber-White.

Dependent Variable:	(1) Portfolio Returns	(2) Portfolio Returns
Intercept	-0.010	-0.010
	(-0.39)	(-0.39)
Event 1	0.195*	0.195
	(1.69)	(0.70)
Event 2	0.142	0.142
	(0.49)	(0.51)
Event 3	0.402	0.402
	(0.96)	(1.44)
Event 4	0.381*	0.381
	(1.67)	(1.37)
Event 5	0.017	0.017
	(0.13)	(0.06)
Event 6	0.538**	0.538*
	(2.11)	(1.93)
Event 7	0.261	0.261
	(1.04)	(0.94)
TA-100 Index	0.739***	0.739***
	(18.05)	(25.13)
Standard Errors	Huber-White	None
# of firms	20	20
Observations	432	432
Adjusted R-squared	0.595	0.595

Description of events:

Event 1: July 28, 2014:   Preliminary vote.

Event 2: May 4, 2015:   Initiation of the bill. Compensation above 3.5 million NIS will not be tax deductible.

Event 3: November 9, 2015:   Initiation vote in the Knesset.

Event 4: January 4, 2016:   First discussion of the bill in the treasury committee.

Event 5: February 15, 2016:   Discussion of the bill in the treasury committee.

Event 6: March 16, 2016:   Unanimous vote for the approval of the bill in the treasury committee

Event 7: March 29, 2016:   Vote for the approval of the bill in the Knesset.

Table 9: Firm-specific disclosures around the main event

The table presents firm-specific events that appear in the economic media and as outcomes of a google search between 03/14/2016 and 03/18/2016, which are 3-days that surround the date of the unanimous vote for the approval of the bill in the treasury committee (March 16, 2016). The table also specify the closest 10K filing date.

Firm	Type	Filings +/- 3days around main event (March 16, 2016)	Closest 10K filing
Analyst	Other	None	March 23, 2016
Ayalon	Insurance	None	March 31, 2016
Beinleumi	Bank	None	February 28, 2016
Bituach Yashir	Insurance	2015 10K filing and declaration of a dividend	March 17, 2016
Clal	Insurance	None	March 23, 2016
Dexia	Bank	None	February 23, 2016
Discount	Bank	None	February 29, 2016
Harel	Insurance	List of common stock and options	March 23, 2016
IBI Investments	Other	None	March 29, 2016
IDI	Insurance	None	February 28, 2016
Igud	Bank	None	February 29, 2016
Jerusalem	Bank	None	February 23, 2016
Leader	Other	None	March 30, 2016
Leumi	Bank	9.5 million USD acquisition of enVerid Systems Inc. by subsidiary Leumi Partners (1.158 CAR). Only one Israeli financial newspaper discussed this (Globes)	February 29, 2016
Meitav	Other	2015 10K filing - 3 day CAR is -0.507 so doesn't explain the positive CAR	March 16, 2016
Menorah	Insurance	On March 15, 2016 the firm announced a class action lawsuit against one of its subsidiaries	March 31, 2016
Migdal	Insurance	None	March 30, 2016
Mizrahi	Bank	Changes in holdings by related parties on March 16, 2016	February 25, 2016
Phoenix	Insurance	None	March 28, 2016
Poalim	Bank	Extension of appointment of 2 directors. Affirmation of A-credit rating by Fitch. (0.449 CAR)	February 29, 2016