I. PRESENTATION

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**MODALITY**

Open

**PROJECT DIRECTOR**

Fernando Lefort Gorchs

**MAIN INSTITUTION**

Universidad Diego Portales

**ASSOCIATED INSTITUTIONS**

Pontificia Universidad Católica de Chile
Superintendencia de Valores Seguros;
Santiago Stock Exchange;
Ernst & Young;
Centro para el Gobierno de la Empresa.

**PERIOD INFORMED**

Jun-2008 – Dec-2012

**MAIN RESEARCHERS**

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<td>Fernando Rodrigo Diaz Hurtado</td>
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b) Associated researchers' information

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II. INDEX

III. EXECUTIVE SUMMARY .......................................................................................................................... 5
IV. RESUMEN EJECUTIVO .......................................................................................................................... 7
V. RESULTS IN RESEARCH ....................................................................................................................... 9
VI. PUBLICATIONS ..................................................................................................................................... 15
VII. CONTRIBUTION TO HUMAN CAPITAL FORMATION ...................................................................... 16
    1) Formal or institutional training activities ............................................................................................ 16
    2) Students, training ............................................................................................................................... 20
    3) Postdocs, and young researchers work ............................................................................................. 23
VIII. FORMATION OF NATIONAL NETWORKS ....................................................................................... 24
IX. INTERNATIONAL COOPERATION ...................................................................................................... 26
X. DISSEMINATION AND OUTREACH ...................................................................................................... 27
    1) Outreach ........................................................................................................................................... 27
    2) Knowledge transfer ......................................................................................................................... 30
XI. PLAN FOR TRANSFER RESULTS AND KNOWLEDGE TO PUBLIC ENTITIES ...................... 32
XII. LESSONS LEARNED .......................................................................................................................... 33
XIII. INDICATORS OF THE PERIOD INFORMED ..................................................................................... 34
XIV. APPENDIX ......................................................................................................................................... 36
III. EXECUTIVE SUMMARY

This section should have no more than 3 pages. Please summarize the updated achievements of the project including those related to research objectives, publications, national and international collaboration, training activities, dissemination to the scientific community, application and/or transfer of knowledge generated and outreach to non-specialized public.

The contents of this section are public and may be published in CONICYT’s web site. Since this summary has to be available to non-experts in your area, we request the use of relatively simple language, photographs, schematic diagrams or explanations when technical terms are require.

Corporate governance can be simply defined as the set of mechanisms put in place by a company, the market and/or the regulator in order to better allocate, among the many stakeholders, control rights over the cash flows generated by a company. Good corporate governance practices facilitate the efficient and fair allocation of rents, fostering investment in the company and increasing its value.

Against the optimal behavior predicted by portfolio theory, firm ownership is rarely diffused in countries other than the United States and the United Kingdom. In fact, two main features characterize the ownership and control structures of most companies in Latin America. First, these companies present a very high ownership concentration. Second, many firms are directly or indirectly controlled by one of the numerous industrial, financial and mixed conglomerates that operate in Latin American economies.

Compared with most of the developing world, successive reforms have made the Chilean stock market very open, transparent, and protective of minority shareholders. Despite these significant reforms the Chilean stock market still remains ‘undeveloped’ along a number of dimensions including market liquidity. This lack of liquidity is in turn a major constraint on further investments, especially by large institutional investors who know that, once in, they cannot cash out quickly. In this environment, Chilean grupos have tended to transition into sectors without large MNCs that could easily expand into Chilean market. Where MNCs have advantages, as in energy and telecommunications, they have managed to buy up most Chilean firms. A close look at Chilean conglomerates is, hence, necessary to properly understand the determinants of their ownership structures.

Consistent with that, the main objective of this project has been to better understand the functioning of corporate governance mechanisms in concentrated ownership companies and to promote good corporate governance practices among Chilean and Latin-American companies.

Our research agenda was organized around four related lines. Substantial progress has been made in the four lines of research. In some cases, the specific agenda proposed has been modified as a result of the evolving interest of the researchers and the intermediate results obtained. The main four areas of research have been:

1. Understanding the impact of Chilean corporate governance and its consequences for firm value and performance.
2. Understanding Ownership Structures in Chile and Latin America.
3. Understanding the dynamics of ownership concentration.
4. Corporate information flows at the country and company level and its impact on new ventures.

As a result of this research, we have produced 8 ISI papers, 1 Scielo paper and 2 book chapters. We have 4 more papers in the process of revision and submission to ISI journals.
Our research has resulted in several interesting findings. We have found a compensation premium of about 30 log points for professional (not controller-related) CEOs working in firms controlled by a family compared to firms controlled by other large shareholders. This premium comes mostly from family firms with absent founders and when sons are involved. We have also found evidence consistent with the hypotheses that groups provide the services of internal capital markets and that firms have become less financially constrained and that a stronger governance reduces the propensity of firms to stockpile cash and generates a lower level of investments and higher payouts to stockholders.

On the other hand, our research shows that most holding companies discounts have a rapid adjustment speed and that an important part of the disequilibrium between net asset value and the holding company market value is corrected in less than one year. We also find that the separation between controller’s voting and cash-flow rights reduces the likelihood of ownership dilution during new equity issues. And that there should be a relation between issuance of IPOCs and cash flow volatility and the probability of renegotiation of IPOC debt contracts.

Finally, we find that the strength of the association between fundamentals and prices has changed during the last 20 years in Chile, being much stronger during the periods of low volatility and risk in international financial markets, which suggests a higher degree of market efficiency during these periods.

Regarding capital formation, both the Master in Finance at PUC and the Master in Management at UDP have benefited from the project. During the duration of the project, over 25 master theses on topics related to the project have been guided by our researchers.

A key goal of this project was to contribute to the creation of a powerful national/international network of people and organizations devoted to the understanding and promotion of good corporate governance practices. Certainly, the project has facilitated networking among researchers of several national institutions such as the Pontificia Universidad Catolica de Chile, Universidad Diego Portales, Universidad Adolfo Ibañez, the Chilean SVS and the Central Bank of Chile. However, the main contribution of this project has been the creation of two corporate governance centers:

1. CGC-UC (Centro de Gobierno Corporativo-UC) which is an association between the Business School and the Law School at Pontificia Universidad Catolica de Chile. CGC-UC has obtained donations and sponsorships to finance academic activities and has established an alliance with Stanford’s Rock Center for Corporate Governance. The activities developed by this center can be found at http://centrogobiernocorporativo.uc.cl/.

2. Board, Center for Corporate Governance & Strategy. This is an initiative of Universidad Adolfo Ibañez, Universidad Diego Portales and Ernst and Young and its main purpose is to provide a place to analyze, study, share and debate about best corporate governance and strategy practices in Chilean and Latin America companies. BOARD, in partnership with the Institute of Directors IoD from the United Kingdom, launched the International Certificate in Company Direction ICCD, a unique Certificate in Latin America oriented to certify directors in corporate governance international best practices.

Finally, in order to transfer valuable knowledge to the market, BOARD made available to the general public BOARD Monitor, a unique online observatory for best investor relations (IR) and corporate governance practices in Latin American companies. It provides objective and relevant governance information, in an easily comparable database. It uses publicly available information, in order to analyze, promote and communicate the status of IR and corporate governance practices by companies. Up to date, BOARD Monitor has registered data from Chile, Peru and Colombia, which show the state-of-the-art and advances made by a number of listed companies in the disclosure of their IR and corporate governance practices.
IV. RESUMEN EJECUTIVO

Dado que el Resumen Ejecutivo podría ser publicado y/o distribuido, esta sección debe ser idéntica a la anterior en términos de contenido, pero en castellano.

El gobierno corporativo puede definirse como el conjunto de mecanismos establecidos por una empresa, el mercado y/o el regulador con el fin de asignar mejor, entre las numerosas partes interesadas, los derechos de control sobre los flujos de caja generados por la empresa. Las buenas prácticas de gobierno corporativo facilitan la asignación eficiente y equitativa de las rentas, y fomentan la inversión y la creación de valor en la empresa.

A diferencia de lo predicho por la teoría de portafolio, la propiedad de las empresas rara vez es difusa. De hecho, la mayoría de las empresas de América Latina presentan una concentración de la propiedad muy alta y están controladas directa o indirectamente por uno de los numerosos conglomerados industriales, financieros y mixtos que operan en las economías de América Latina. En comparación con la mayoría de los países en desarrollo, el mercado de valores chileno es muy abierto, transparente y entrega un adecuado grado de protección a los accionistas minoritarios debido a las sucesivas reformas implementadas. Sin embargo, a pesar de estas reformas el mercado de valores chileno aún sigue siendo "subdesarrollado" en varias dimensiones, incluyendo la liquidez. La falta de liquidez es una importante limitación para la atracción de nuevas inversiones, sobre todo por parte de grandes inversionistas institucionales.

De acuerdo a lo anterior el objetivo principal de este proyecto ha sido comprender mejor el funcionamiento de los mecanismos de gobierno corporativo en compañías con propiedad concentrada y promover las buenas prácticas de gobierno corporativo entre las empresas chilenas y latinoamericanas.

Nuestra agenda de investigación se organizó en torno a cuatro líneas relacionadas. Se ha logrado un importante nivel de avance en las cuatro líneas de investigación. En algunos casos, el programa específico propuesto se ha modificado como consecuencia de la evolución de los intereses de los investigadores y de los resultados intermedios obtenidos. Las cuatro líneas de investigación han sido:

1. Comprender el impacto de la calidad del gobierno corporativo en el funcionamiento y valoración de las empresas chilenas.
2. Comprender las estructuras de propiedad en Chile y América Latina.
3. Entender la dinámica de la concentración de la propiedad.
4. Entender el efecto de la calidad de la información de mercado sobre la creación de nuevas empresas.

Como resultado de esta investigación, se han publicado 8 artículos ISI, un artículo Scielo y 2 capítulos de libros. Contamos con 4 artículos más en el proceso de revisión y presentación a revistas ISI. Nuestra investigación ha dado lugar a varias conclusiones interesantes. Hemos encontrado un premio de 30 puntos en la compensación de los gerentes generales que trabajan en empresas controladas por una familia en comparación con otras empresas. Este premio se produce principalmente en las empresas familiares con los fundadores ausentes y cuando los hijos están involucrados. También se ha encontrado evidencia consistente con la hipótesis de que los grupos económicos proporcionan los servicios de un mercado interno de capital, y que un buen gobierno corporativo reduce la propensión de las empresas a acumular dinero en efectivo, genera un menor nivel de inversiones y un aumento en los pagos a los accionistas.
Por otra parte, nuestra investigación muestra que los descuentos holding observados presentan una rápida velocidad de ajuste, corrigiéndose el desequilibrio entre el valor del activo neto y el valor de mercado del holding en menos de un año. También encontramos que la separación entre los derechos de voto y los derechos de flujo de caja del controlador reduce el riesgo de dilución de propiedad en momentos de nuevas emisiones de capital. Y que debería haber una relación entre la volatilidad de los flujos de caja y la probabilidad de renegociación de los contratos de deuda tipo IPOC.

Por último, encontramos que la intensidad de la asociación entre fundamentos y precios de acciones ha cambiado durante los últimos 20 años en Chile. Esta asociación es más intensa durante los periodos de baja volatilidad y riesgo en los mercados financieros internacionales, lo que sugiere un mayor grado de eficiencia informacional del mercado de capitales chileno durante esos períodos.

En cuanto a la formación de capital, tanto el Máster en Finanzas de la PUC y el Máster en Administración de la UDP se han beneficiado ampliamente del proyecto. Durante la duración del proyecto, más de 25 tesis de máster sobre temas relacionados con el proyecto han sido guiadas por nuestros investigadores.

Un objetivo clave de este proyecto es contribuir a la creación de una potente red nacional / internacional de personas y organizaciones dedicadas a entender mejor y promocionar las buenas prácticas de gobierno corporativo. Ciertamente, el proyecto ha facilitado la creación de redes entre investigadores de diversas instituciones nacionales como la Pontificia Universidad Católica de Chile, Universidad Diego Portales, Universidad Adolfo Ibáñez, el chileno SVS y Banco Central de Chile. Sin embargo, la contribución principal de este proyecto ha sido la creación de dos centros de gobierno corporativo:

1. CGC-UC (Centro de Gobierno Corporativo-UC), que es una asociación entre la Escuela de Administración y la Escuela de Derecho de la Pontificia Universidad Católica de Chile. CGC-UC ha obtenido donaciones y patrocinios para financiar las actividades académicas y ha establecido una alianza con el Rock Center de Gobierno Corporativo de la Universidad de Stanford. Las actividades desarrolladas por este centro se pueden encontrar en http://centrogobiernocorporativo.uc.cl/.

2. Board, Instituto de Gobierno Corporativo y Estrategia. Esta es una iniciativa de la Universidad Adolfo Ibáñez, la Universidad Diego Portales y Ernst and Young y su principal objetivo es generar un lugar para analizar, estudiar, compartir y debatir sobre las mejores prácticas de gobierno corporativo y estrategia en las empresas chilenas y de América Latina. BOARD, en colaboración con el Instituto de Directores IOD del Reino Unido, lanzó el Certificado Internacional en Dirección de Empresas ICCD, un certificado único en América Latina orientada a certificar directores de gobierno corporativo en las mejores prácticas internacionales.

Por último, con el fin de transferir conocimientos valiosos para el mercado, Board ha puesto a disposición del público BOARD Monitor, un observatorio en línea que da a conocer las prácticas de relaciones con inversionistas (IR) y las prácticas de gobierno corporativo de las principales empresas latinoamericanas. Board Monitor proporciona información objetiva y relevante sobre gobierno corporativo, que permite hacer comparaciones entre empresas de diferentes países de la región. Hasta la fecha, Board Monitor ha registrado los datos de Chile, Perú y Colombia, mostrando el estado del arte en gobierno corporativo y los avances realizados por las empresas que cotizan en las bolsas de los tres países.
RESULTS IN RESEARCH

Use a maximum of 5 pages in this section in order to inform the results of the research activities during the Project.

In order to fill up this section please follow the instructions:

a) Organize this section according to the specific objectives of the Project, mentioning all changes, modifications or replacements. Use for that the Work Plan presented in your Project.

b) If the research team considers necessary to mention negative results and requires space to discuss them, it should use this section for that purpose.

c) If there are papers in progress related to the research results, please include them in this section. The information about published papers and those formally accepted for publication should be included in section VI. PUBLICATIONS.

According to the work plan developed during this project, our research agenda has been organized around four main general objectives. Substantial progress has been made in the four lines of research. In some cases, the specific agenda proposed has been modified as a result of the evolving interest of the researchers and the intermediate results obtained.

First Objective: Understanding the impact of Chilean corporate governance and its consequences for firm value and performance.

We proposed to make a contribution in understanding the impact of corporate governance practices in Chilean companies on their performance and market value. Despite recent efforts, there still remains a lot to explain in terms of the effects of corporate governance practices at the firm level on firm market valuation in the context of an emerging economy.

Our research agenda has been developed producing a paper that provides a general context of corporate governance practices in Chilean companies and their expected effect on companies’ policies and performance. As a result, Fernando Lefort and Rodrigo González (both at Universidad Diego Portales) published the paper “Towards a better Corporate Governance in Chile” at the national refereed journal Abante. This paper discusses the conceptual framework about corporate governance in emerging economies. Based on that framework and in the Chilean and international evidence, this paper analyses the main aspects concerning the corporate governance practices of Chilean companies, and explores several venues towards improving corporate governance in Chile.

We have also produced three papers that explore the effects of corporate governance and structure on two key policies of companies: CEO compensation and cash holdings.

The paper “CE0 Compensation and Large Shareholders: Evidence from Emerging Markets” that we mentioned in the previous progress report, and which was written by Borja Larrain and Francisco Gallego (Economics department, PUC Chile), has been published in the Journal of Comparative Economics in 2012. The final abstract of the paper is as follows: “Using a novel data base for three emerging markets we study large shareholders and their relationship with professional managers. This is important to understand wage inequality and returns to high-level human capital since concentrated ownership is prevalent in developing countries. We find a compensation premium of about 30 log points for professional (not controller-related) CEOs working in firms controlled by a family compared to firms controlled by other large shareholders. The premium cannot be explained away by standard firm characteristics, observable executive skills (e.g., education or tenure), or the
compensation of the CEO in her former job. The premium comes mostly from family firms with absent founders and when sons are involved."

The paper “Cash Holdings and Conglomerates: Evidence from an Emerging Market” by Paulina Rojas (former Master’s in Finance student at PUC) and Eduardo Walker (School of Business, PUC, Chile) has been significantly revised and is in the process of being submitted to a corporate finance journal. An additional researcher has been added to the team (David Buchuk, formerly a Master’s in Finance student at PUC and now Ph.D. Student in Finance at the University of Houston, Texas, USA). The database used has been significantly revised and we have new results: “We study the determinants of firm liquidity holdings relating them with business group affiliation, using a sample of non-financial Chilean firms for the period 1991-2008. Local regulation limits the importance of banks for groups so Internal Capital Markets (IKMs) really are internal to the firms in a group. We look at the liquidity management by firms that belong to business groups, which may have IKMs associated with them. Since related party transactions are strictly regulated and subject to an important degree of scrutiny, the possible horizontal agency problem between minority and controlling shareholders associated with group liquidity management is presumably unimportant.

We don't find evidence of a reduction in the relative importance of group-related variables but we do find a downward trend in average cash holdings for affiliated and non-affiliated firms. The impact on cash holdings of firm-specific variables such as cash flow volatility and the own firm's lagged Q are significantly positive, and of lagged net working capital and leverage, significantly negative. The interactions with group dummies suggest that group affiliation tends to compensate the sensitivity of cash holdings to these variables. In summary, we find evidence consistent with the hypotheses that groups provide the services of internal capital markets and that firms have become less financially constrained. However, whether in the aggregate groups manage liquidity more efficiently is not conclusive. It depends on how we interpret the relatively large investments by HCs in financial assets."

Finally, the paper "Firm Level Cash Flow Sensitivity of Cash and Corporate Governance" was written by Fernando Díaz (Universidad Diego Portales) and Gabriel Ramirez (Kennesaw State University) and it is currently under second review in Quantitative Finance. The abstract of the paper is as follows: "We construct a new measure of firm-level “cash flow sensitivity of cash”. Our proposed measure allows us to incorporate unobservable, time-invariant firm characteristics in the analysis of firm’s cash flows, in addition to the traditional observable, firm specific characteristics. By means of a Correlated Random Effects methodology, we empirically implement this measure using proxies for the level of firm’s financial constraints, governance, and the tangibility of assets. We present evidence that cash flow sensitivity depends on unobservable firm characteristics specifically related to the generation of cash flows. With respect to observable characteristics, we find that stronger governance reduce the propensity of firms to stockpile cash. Furthermore, and consistent with this result, stronger governance in financially constrained firms induce lower level of investments and higher payouts to stockholders. Our proposed methodology may play a central role in future empirical research expanding upon this new dimension of governance, as reflected in the power struggle between management and shareholders, particularly in relation to financing constraints and cash accumulation policies."

Second Objective: Understanding Ownership Structures in Chile and Latin America

We proposed to characterize the stylized factors explaining the ownership structure of Chilean companies and compare them to other emerging economies. Compared with most of the developing world, successive reforms have made the Chilean stock market very open, transparent, and protective of minority shareholders. Despite these significant reforms the Chilean stock market still remains ‘undeveloped’ along a number of dimensions including market liquidity. This lack of liquidity is in turn a major constraint on further investments, especially by large institutional investors who know that, once in, they cannot cash out quickly. In this environment, Chilean grupos have tended to transition into sectors without large MNCs that could easily expand into Chilean market. Where MNCs have advantages, as in energy and telecommunications, they have managed to buy up most
Chilean firms. A close look at Chilean conglomerates is, hence, necessary to properly understand the determinants of their ownership structures.

A close view to the ownership and control structures of Chilean companies is provided in the paper “Business Groups in Chile”, published by Fernando Lefort (Universidad Diego Portales) in 2010 as a chapter of the Oxford Handbook of Business Groups. This paper looks at the main features of Chilean business groups and tries to draw some stylized factors that help to understand their dynamic evolution. While it is difficult to characterize a general strategy and structure for “the” Chilean business group, it is possible to lay down some stylized facts. This chapter has argued that many of the largest, most successful Chilean business groups started and/or received a major push as a consequence of the privatization of state owned companies, and that a solid financial position at the time of the privatizations seems to have been a key to success. Largest domestic Chilean business groups in general represent unrelated diversification. A significant category is the pattern of unrelated diversification via exploiting the natural resources in the country. Further unrelated diversification of these groups resulted from the investment opportunities arisen from the privatization plans and the failure of highly indebted groups during the 1982 debt crises. A second category is the groups mainly in the retail sector but also have interest in financial services. Then finally, we see the presence of multinationals in Chile that are formed as “pyramidal” groups, and are focused in their business portfolios. The financial services industry is especially dominated by foreign banks that also participate in the pension fund and insurance businesses, while in the utilities sectors multinational companies are again dominant. Recent expansion of the operations of Chilean business groups traditionally serving the domestic market has occurred through large investments in other countries in Latin America. This has happened in the retail sector with significant investments in Peru, Argentina and Colombia, and indicates that fierce domestic competition has allowed Chilean retail companies to build strong competitive capabilities. On the other hand, business groups focused on the exploitation of natural resources have dramatically increased their exports and widened their operational basis exploiting resources in other countries. Finally, large Chilean business groups are organized around holding companies. This companies trade at a 30% discount of their net asset value. Controlling shareholders hold large amounts of equity and firmly control decisions at shareholders meetings. Chilean family groups are tightly controlled by the founding families. Although management has become increasingly professional, strategic decisions are made by the owners.

Holding structures and holding discounts have an important object of study in the corporate finance literature. Fernando Lefort, Rodrigo González and Ignacio Gálvez have explored ownership structures of Chilean business groups. This paper reports holding daily discounts for the period January 1993- December 2007, for nine selected business groups in which the holding company is a public company, traded in the Chilean stock market, with no activities except for investing (being shareholder) in subsidiaries. Holding company companies in Chile are used to trade at significant discounts compared to their net asset value. This phenomenon is known in financial markets as the holding company discount. Considerable explanations have been quoted in order to clarify it, but the debate about holding company discount is far from being solved. In Chile, investments banks recommend the purchase of the holding company stock or the underlying shares from the study of the difference between the current level of discount and its historic mean, arguing that there is some space to obtain significant excess returns. This could only be possible if discount time series are in fact stationary and mean reverting. Using a filters strategy and a cointegration analysis, we test for the investment proposals convenience and we estimate the speed of the mean regression adjustment of the discounts. Results show that holding companies discounts have a rapid adjustment speed and that an important part of the disequilibrium between net asset value and the holding company market value is corrected in less than one year. This paper is still under revision.

Following that line of thought, Fernando Lefort and Rodrigo González (UDP) have written the paper “Holding Company Discounts and Business Groups Optimal Bailout of Subsidiaries”. In this paper, we develop a simple two period model of the holding company-subsidiary relationship that analyzes the option faced by controlling shareholders to optimally bailout subsidiary companies using the holding company’s financial resources. This
behavior is rational under several incentive structures originated in the presence of group externalities, synergies and private benefits of control. The results of our model are consistent with recent empirical evidence of holding company discounts, and with the existence of diffuse limits among the affiliated firms of a group. Our results allow us to interpret the presence of holding company discounts as evidence that bailing-out may arise for reasons other, and less conflictive, than the perpetuation of tunneling benefits by the controlling shareholder, such as the perpetuation of benefits of reputation and group synergies. This paper is being submitted to the Journal of Financial Economics.

Third objective: understanding the dynamics of ownership concentration.

The paper “Ownership Dynamics with Large Shareholders: An Empirical Analysis” that we mentioned in the previous progress report, and which was written by Borja Larrain together with Marcelo Donelli (former master’s student at PUC) and Francisco Urzua (former student at PUC and currently an Economics PhD student at Tilburg), has been accepted for publication at the Journal of Financial and Quantitative Analysis. The abstract of the paper is as follows: “We study the empirical determinants of corporate ownership dynamics in a market where large shareholders are prevalent. We use a unique, hand-collected 20-year dataset on the ownership structure of Chilean companies. Controllers’ blockholdings are on average high -as in continental Europe, for instance- and quite stable over time. Controllers still make non-trivial changes to their holdings through issuance and block trades. In a typical year controllers’ blockholdings decrease (increase) by 5 percentage points or more in approximately 6% (7%) of firms. Few of these events are associated with changes in the identity of the controller although about half are correlated with changes in the size or composition of the board of directors. We find that the separation between controller’s voting and cash-flow rights reduces the likelihood of ownership dilution. Dilution is preceded by high stock returns, and predicts low stock returns in the future (particularly when done through issuance). Dilution does not seem to be followed by higher investment, debt growth, changes in profitability, or turnover in control.” Before the JFQA this paper was submitted and rejected from the Review of Financial Studies and the Journal of Financial Economics.

Fourth objective: corporate information flows at the country and company level and its impact on new ventures.

The paper “Equity Issues and Return Volatility” that we mentioned in the previous progress report, and which was written by Borja Larrain and Felipe Varas (former student at PUC and currently a Finance PhD student at Stanford GSB), has been accepted for publication at the Review of Finance. The abstract of the paper is as follows: “We show that the repurchaser-issuer return spread is stronger among stocks with high return volatility. Rational and behavioral theories predict that this finding is the product of risk volatility and sentiment volatility.
respectively. However, our results are inconsistent with these theories as they currently stand. Loadings on standard risk factors do not follow the dynamics that would explain the return predictability related to issuance decisions. If we sort on a stock's beta with respect to Baker and Wurgler (2006)'s aggregate sentiment index, which proxies for sentiment volatility, the results are weaker—economically and statistically—than when sorting on return volatility.

The paper written by Borja Larraín together with Long Chen (Washington University in St Louis) and Zhi Da (Notre Dame University) titled “What moves investment growth?” is under revision at the American Economic Journal Macroeconomics. The current abstract is as follows: “We use accounting identities to decompose unexpected changes in investment growth into surprises to current cash-flow growth and stock returns, and revisions of expectations about future cash-flow growth and future discount rates. Using a vector autoregressive model we find that current cash-flow surprises account for the largest component in the variance decomposition. Investment growth is negatively correlated with news about future cash-flow growth, something that can be expected from persistent productivity shocks and decreasing returns to scale. Return terms are of second order importance and have unintuitive signs. Thus, the market looks like a sideshow for understanding investment growth.” The paper was rejected by the Review of Financial Studies since the last progress report. Given the relatively positive letter from the AER editor in 2010, in which he suggested we try the AEJ, we decide to submit there.

Kenneth N. Daniels (Virginia Commonwealth University), Fernando Díaz (Universidad Diego Portales) and Gabriel G. Ramírez (Kennesaw State University) have written the paper “The Existence of Corporate Bond Clawbacks (IPOCs): Theory and Evidence”. The abstract of the paper is: A clawback provision allows the issuer to partially redeem a bond issue often within three years of issuance using proceeds only from new equity issues. However, empirical evidence indicates the clawback provision is rarely exercised. This poses an interesting dilemma as IPOCs are an expensive source of funding, often commanding yields that are significantly higher than traditional corporate bonds. We develop a simple model that provides a rationale for the scarcity of clawback call redemptions, and higher yields seen when using IPOCs. The model also predicts a relation between issuance of IPOCs and cash flow volatility and the probability of renegotiation of IPOC debt contracts. We test the implications of our model regarding issuance of IPOCs, yields, and the propensity to renegotiate debt and find supporting evidence for the propositions of the model. This paper has been accepted by the Journal of Corporate Finance.

The paper “The Impact of External Economic Conditions on Market Efficiency: Evidence for a Small and Open Economy” was written by Fernando Díaz and Fernando Lefort. The abstract of the paper is as follows: “We analyze the evolution of market efficiency and the dynamics of the synchronicity measures proposed in the R squared literature for the Chilean economy for the 10 years period between 1997 and 2007. We find that the distributions of stock price synchronicity measures remains relatively stable during our sample period, which suggests no changes in the degree of efficiency of the market. We argue, however, that statistical tests of market efficiency based on stock price synchronicity may be misleading in a context of changing volatilities. Furthermore, when we analyze the relation between stock price co-movements and fundamentals co-movement, we obtain results that contradict the conclusions obtained from the synchronicity based tests. In this sense, we find that the strength of the association between fundamentals and prices does change over our sample period, being much stronger during the periods of low volatility and risk in international financial markets, which suggests a higher degree of efficiency for these periods.” This paper is under revision at the Journal of Financial Stability.

Fernando Díaz, Fernando Lefort and Marco Morales have written the paper “Finance, Productivity and Growth: Does it work for Chile?” In this article we analyze the relationship between financial development and Total Factor Productivity (TFP) in the Chilean economy. Specifically, we attempt to answer the following questions: Is there a noticeable improvement in the working of the financial markets in Chile arising from the recent reforms to its financial system? Has the development of the Chilean financial markets contributed to increase total factor
productivity and economic growth? We find no support for a statistically significant relationship between financial development and TFP. Accordingly, we argue that in spite of the above mentioned reforms, there are still important shortcomings in the role that private agents have in monitoring firms’ activities and improve investor protection. The evidence provided in this paper regarding the null increase in informational content of stock prices after the MK1 reform is consistent with this idea.

We argue that there is room for an increased involvement of private agents such as analysts, market makers and dealers, in the Chilean financial system. A possible reason for the diminished involvement of such agents is precisely the relatively low traded volumes in Chilean markets. This paper is forthcoming in *Raising the Sustainable Rate of Growth of Chile: Where are the Opportunities?*, Vittorio Corbo Editor.
V. PUBLICATIONS

List the publications resulting from the project. The list should include only published papers or papers that have been formally accepted for publication. The information about manuscripts in preparation or submitted must be included in section V. RESULTS IN RESEARCH.

In the section XIV. APPENDIX, include a digital copy of letters or email messages confirming acceptance of the papers not yet published.

Include a digital copy of published papers and papers that have been formally accepted for publication. Do not include printed copies of papers. The digital copy satisfies the requirement.


10. “Finance, Productivity and Growth: Does it work for Chile?”, Fernando Díaz, Fernando Lefort and Marco Morales. Forthcoming in Raising the Sustainable Rate of Growth of Chile: Where are the Opportunities?, Vittorio Corbo Editor.


The initial footnote in each paper acknowledges financial support from CONICYT.
VI. CONTRIBUTION TO HUMAN CAPITAL FORMATION

1) Formal or institutional training activities

If any of the project participants is involved in a course in which the project research is relevant, please indicate so stating the title of the course or the particular unit of the course that is being dictated, to whom is directed (graduate programs, undergraduate programs) and which of the participants are involved.

If there is any planning or actual performing of any graduate program regarding, or as consequence of the project research, please mention the state of the art for that particular situation.

Any other activity that you consider relevant to mention in this aspect, please include it here.

First Year

During the first year of the program, there were four formal academic programs offered by the Business School at PUC that have directly benefitted from this project.

First, the new Master in Finance Program at PUC, covers several topics of corporate governance. Professors Lefort, Larrain and Walker teach different courses at this program that use as a teaching material the current research activities funded by this project. In addition, professors Larrain and Walker (part of the Anillo project) jointly with professor Rodríguez (Director of the Master in Finance Program at PUC) are directing a new course during the first semester of 2009 (EAA3290) that supports graduate students in the development of their master’s thesis. Three out of six students (Ignacio Galvez, Paulina Rojas and Julio Galvez) doing research work for their dissertations are working in ideas related with the research agenda of the project and are receiving funds from the Anillo Project. (See 2) Students, training)

Second, at the Ph.D level the Faculty of Economics and Administration of PUC has a Ph.D in Economics and is ready to launch a new Ph.D in Business Administration. The research performed under the Anillo Project has strengthen the Ph.D in Economics and it will be key to the success of the Ph.D. in Business Administration. Currently, Professor Larrain is teaching a PhD class for the economics students at PUC (open also to masters’ students). The course is titled Macroeconomics and Finance: Empirical Applications (EAE3791: Macroeconomia y Finanzas: Aplicaciones Empiricas). The second half of the class touches upon many of the issues related to the current project, in particular, ownership structure and corporate governance in emerging markets. The course presents the relevant literature on the causes underlying differences in corporate governance (e.g., legal origin hypothesis) and the consequences for growth and business cycles. Furthermore, Professor Lefort is the Director of the Ph.D in Business Administration that will feature a course on corporate governance and will use funds from the Anillo project to support Ph.D students.

Third, the Business School at PUC and Kellogg Shool of Management launched a joint training program for Senior Management. The program had a full module devoted to corporate governance that presented practical applications of research conducted by Professor Lefort from PUC and Thomas Lys from Kellogg. 34 senior managers and board members of companies from Chile, Peru, and Argentina participated in the three week program.

Fourth, during 2009 the Business School and the Law School at PUC have formally created the Center for Corporate Governance UC in order to engage in multidisciplinary research on corporate governance and to offer joint training programs in corporate governance. The Anillo Project is a keystone to the Center. The first
joint activity of the Center was a certificate program in Corporate Governance that started in May 2009. The program has 18 participants coming from private and state owned companies.

Second Year

During the second year, academic programs related to finance fields hosted at Pontificia Universidad Católica de Chile and that were directly benefited from the program, experienced an important degree of consolidation.

On such program is the Master in Finance. Borja Larrain and Eduardo Walker were in charge of the final thesis seminar for this program (EAA3290: Seminario Final de Graduacion Magister Finanzas). During the first semester of 2010 several students did research on topics broadly related to our project. The list of students and their theses is as follows:

- Verónica Ayzaguer: Can dividends give additional information with respect to future results?
- Jean Paul Latournerie: OPAs in Chile: The use of Inside Information.
- Walter A. Martínez: Study on the private financing of housing in Chile.
- José Ignacio Ezquerra: Development of derivatives markets in Chile.
- Sofía C. Rodilla: Personal taxes, capital structure, and financing decisions in Chile.
- Natalia Drullinsky: Stock price effect when stocks are added or deleted from the Chilean Index IPSA.

In the second semester of 2009 Borja Larrain was the thesis advisor of Marcelo Donelli, masters in Finance student at PUC. His thesis became the first step for the joint paper on ownership dynamics already mentioned in Section IV.

In the second semester of 2010 Borja Larrain taught a required class for the masters in Finance program at PUC. The course is entitled The Theory of Corporate Finance (EAA3220). The course touches upon many of the issues related to the current project, in particular, ownership structure and corporate governance in emerging markets.

Also starting in the first semester of 2010, Borja Larrain has been organizing a seminar series where professors from PUC and outsiders present their work in progress. The seminar meets once every two weeks approximately.

As the Anillo moved to Universidad Diego Portales, a series of training activities have started at School of Business and Economics in UDP. The educational model at Universidad Diego Portales emphasizes the importance of the link and long term relation with students, from their early years of graduation and through their entire professional careers. In the spirit of this vision is that the School of Business and Economics has developed a MSc. Program in Management in which its best students could deepen disciplinary knowledge, with a distinctive emphasis in practice.

The program, officially launched during the second term of 2010, has currently two majors, marketing and finance, and the university expects to expand its coverage to all the core disciplines of business administration. The program has been initially offered to students of Commercial Engineering, who can obtain their corresponding grade studying an additional semester to their careers. The candidates apply to the program at the beginning of their final undergraduate year. The admission has been extended in 2011 to other two schools of our University, Civil Engineering and Psychology. In the medium term, the program should be opened for the whole university community.
The experience with the first generation of students was most successful. In fact, the program has attracted 15 students in the first term of 2011. Most of these students were ranked on the 90th percentile of their respective generations.

With respect to the course work, all students must take two core courses common to both mentions: Competition and Strategy, an applied course covering topics in industrial organization, strategy and game theory, and Empirical Methods, which covers standard material in multivariate analysis.

Students enrolled in the Finance major, take three required courses: Derivatives, an option pricing course with strong emphasis on real life situations, Financial Econometrics, a standard course in time series, and Advanced Topics in Finance, which covers the main topics on investments, corporate finance and asymmetric information, agency problems and governance. This course is aligned with the objectives of this project.

In addition, finance students take two additional master level courses. During the second term of 2011, the School offered Advanced Corporate Finance, a rigorous course covering capital structure, dividend policy and agency problems, and International Economics, a course covering topics in open economies macroeconomics.

**Third Year**

Regarding the academic activities at PUC, Borja Larrain and Eduardo Walker were in charge of the final thesis seminar for the masters in finance (EAA3290: Seminario Final de Graduacion Magister Finanzas). During the first semester of 2011 and 2012 several students did research on topics broadly related to our project. The list of students and the title of their theses is as follows:

### 1st Semester 2011

<table>
<thead>
<tr>
<th>Name</th>
<th>RUT</th>
<th>Thesis Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andres Ha Chun</td>
<td>16531716-5</td>
<td>Evolucion y desarrollo de la industria de fondos mutuos chilena</td>
</tr>
<tr>
<td>David Andres Buchuk</td>
<td>13548940-0</td>
<td>Conglomerados Chilenos bajo Distress</td>
</tr>
<tr>
<td>Alfredo Enrique Achondo</td>
<td>16211527-8</td>
<td>Determinantes de la colaterilizacion en la deuda</td>
</tr>
<tr>
<td>Diego Jose Grove</td>
<td>16096997-0</td>
<td>Riesgos de liquidez y retornos esperados en el mercado chileno</td>
</tr>
<tr>
<td>Luis Fernando Ayala</td>
<td>23159375-6</td>
<td>Banco de Guayaquil: financiando el crecimiento</td>
</tr>
<tr>
<td>Pilar Veronica Oyanedel</td>
<td>16369680-0</td>
<td>Mejorando el desempeño fuera de muestra de predicciones de equity premium</td>
</tr>
<tr>
<td>Pamela Valdivieso</td>
<td>16659328-K</td>
<td>El mercado small cap en Chile</td>
</tr>
<tr>
<td>Vivian Lucia Lau</td>
<td>23076753-K</td>
<td>¿Subsidios cruzados en Chile? Análisis empírico de holdings</td>
</tr>
</tbody>
</table>

### 1st Semester 2012

<table>
<thead>
<tr>
<th>Name</th>
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<th>Thesis Title</th>
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</thead>
<tbody>
<tr>
<td>Joaquin Canessa</td>
<td>16938353-7</td>
<td>Decisiones de inversión en el mercado Chileno: midiendo el efecto de las AFP</td>
</tr>
<tr>
<td>Marta Andrea del Sante</td>
<td>15780541-K</td>
<td>IPO underpricing - Evidencia para Chile</td>
</tr>
<tr>
<td>Benjamín Vodanovic</td>
<td>16607972-1</td>
<td>¿Afectan los impuestos corporativos las decisiones de financiamiento?</td>
</tr>
<tr>
<td>Catalina Piderit</td>
<td>16608705-8</td>
<td>El efecto momentum y su relación con el volumen en Chile</td>
</tr>
<tr>
<td>Cristian Andrés Rojas</td>
<td>16369225-2</td>
<td>Nivel de Leverage de empresas Chilenas</td>
</tr>
<tr>
<td>Evelyn Von</td>
<td>17085164-1</td>
<td>Empresas familiares y su desempeño: evidencia para Chile</td>
</tr>
<tr>
<td>Bischoffshausen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juan de Dios Iraguen</td>
<td>17154978-7</td>
<td>Eficiencia en el mercado accionario y tipo de cambio chileno</td>
</tr>
</tbody>
</table>
Borja Larrain was also in the thesis committee of Vesna Mandakovic who graduated with a PhD in Economics from PUC during the second semester of 2012. Her thesis title was “Essays on firm heterogeneity and employment protection legislation.”

In the second semester of 2011 and 2012 Borja Larrain taught a core class for the masters in Finance program at PUC. The course is titled The Theory of Corporate Finance (EAA3220). The course touches upon many of the issues related to the current project, in particular, ownership structure and corporate governance in emerging markets.

In the second semesters of 2011 and 2012 Eduardo Walker taught a course called Investment Management (EAA306D). This is a course valid as an elective for the masters in Finance program. The course covers valuation issues and relates them with corporate governance.

At Universidad Diego Portales, Fernando Lefort and Fernando Díaz we are in charge of the thesis seminar for the masters of science in management . During the year 2012 four students did research on topics broadly related to our project. The list of students and the title of their theses is as follows:

- Diego Ortuzar: Gobiernos corporativos en las empresas chilenas y su impacto en el mercado financiero.
- Fernanda Gálvez: Relación entre el desempeño financiero y el precio de las acciones para empresas chilenas en periodos de crisis
- Cristóbal Mac-kak: Caso La Polar
2) Students, training

This subsection consists mainly in a description of activities focused in the formation and training of students. If there are special highlights that you consider should be mentioned in addition to the information required, please refer to section V. RESULTS IN RESEARCH, making specific reference to the student work.

First Year

During the first semester of 2009 three students of the MSc Program in Finance did research on topics closely related to our project.

- Local Bond Interest Rate Spreads. This thesis studies the determinants of local bond spreads based on aggregate and company fundamentals. One particular issue to be addressed is whether group-related firms have higher or lower spreads, other things equal. Lower spreads imply that capital markets consider groups to provide additional guarantees, as compared with non-group firms. On the contrary, higher spreads can be associated with a higher likelihood of expropriation. The student currently pursuing this line of research is Julio Gálvez.

- Cash Holdings of group-related firms. The hypothesis explored here is that group-related firms need less cash holdings for their normal operations since they have the option of group financing. This should be particularly noticeable in periods of liquidity constraints, either cyclical or structural. The student currently pursuing this line of research is Paulina Rojas.

- The “holding discount” for group-related firms. It has been documented that holdings in general tend to be traded at a discount as compared with their net asset value. A particularity of the Chilean case is that companies are associated to groups using pyramid schemes. It is thus interesting to study whether the holding discount is larger for Chilean holdings, which may reflect expropriation risk. Also, if these discounts are not relatively stable through time and if there are trading opportunities based on their magnitude, the expropriation hypothesis loses ground against alternative hypotheses related with market efficiency. The student currently pursuing this line of research is Ignacio Gálvez.

In addition, Rodrigo Gónzalez, Ph.D student at Universitat Autonoma de Barcelona, worked in his thesis under the supervision of Professor Lefort. His research focused on explaining the holding discount. Specifically, in the option that shareholders have to avoid bankruptcy assuming Unlimited Liability (UL) or propping. Working with Fernando Lefort, they modeled optimal behavior of a holding company analyzing the conditions that make UL a rational behavior. They find that Propping may arise for reasons other than tunneling and that the mere possibility to Prop may imply a Holding Discount.

Felipe Varas (currently a Finance PhD student at Stanford GSB) wrote a paper with Professor Larrain about equity issues of U.S. firms and their connection to analysts’ expectations. Although this project focused on the U.S. it had natural implications for emerging markets where market timing is also prevalent according to recent studies. This paper was presented during October of 2008 in the finance seminars at Harvard University and Washington University in St Louis.

Two other graduate students from the Faculty of Economics and Administration, Benjamín Maturana and Christian Salas worked as research assistants for different areas of the project being funded by the Anillo. Christian Salas worked in a paper about executive compensation in Latin America. Christian learned a lot about this topic, and also about handling an empirical project such as this with various software applications.
(Stata, in particular). Benjamin Maturana worked for the project Pension fund governance and investment decisions.

**Second Year**

Christian Salas, worked as a research assistant for Borja Larraín and Francisco Gallego and became full-time lecturer in the economics department at PUC.

Andres Vicencio and Francisco Muñoz worked as research assistants for Borja Larraín. Both are students of the masters in economics at PUC. As research assistants they learned to be proficient with Stata, Matlab, and other statistical software required for empirical projects.

Darío Zúñiga was research assistant of Fernando Lefort while completing his Master’s dissertation at Universidad de Chile. His thesis was “Ownership Structure and Investment: Evidence for Chile”. In Chile companies listed on the stock exchange present high ownership concentration and many of them are controlled by one of numerous economic groups. These groups control several companies through pyramidal structures and shareholding series with preferential rights. This paper develops a model of the effect of ownership and control structures on the investment decisions of the firm. Using a panel with quarterly information about companies traded on the Santiago Stock Exchange during the period 1997-2008, and in line with the predictions of the model, the paper finds that the propensity to invest decreases with the proportion of cash flow rights of the controlling shareholder. Finally, recent takeover law has not had a significant impact on the effect of the structure of ownership on investment decisions.

At the masters program in UDP students were encouraged to engage in research projects and several of them started to work in projects related to the Social Sciences Ring (Anillo).

**Third Year**

Andres Vicencio, a former master’s student in economics at PUC who graduated in 2011, was a research assistant for the papers World Betas, Consumption Growth, and Financial Integration published in the Journal of International Money and Finance in 2011, CEO Compensation and Large Shareholders: Evidence from Emerging Markets published in the Journal of Comparative Economics in 2012, and Ownership Dynamics with Large Shareholders: An Empirical Analysis, which is forthcoming at the Journal of Financial and Quantitative Analysis. As research assistant Andres became proficient in Stata, Matlab, and other statistical software required for empirical projects.

Francisco Muñoz, a former masters student in economics at PUC who graduated in 2012, was a research assistant for the papers Ownership Dynamics with Large Shareholders: An Empirical Analysis, which is forthcoming at the Journal of Financial and Quantitative Analysis, and Controlling Shareholders and Market Timing in Share Issuance, which is forthcoming at the Journal of Financial Economics. As research assistant Francisco acquired some of the skills necessary to continue as an economics PhD student at Stanford starting from August 2012. Borja Larraín wrote one of the letters of recommendation for Francisco’s application to several PhD programs abroad.

Jose Ignacio Llodra, a current master’s student in economics at PUC, was a research assistant for Borja Larraín briefly during the second semester of 2012. He had miscellaneous tasks regarding several research projects.

David Buchuk, formerly a master’s student in Finance at PUC is now a Ph.D. in Finance student at the University of Houston, Texas, USA. He is also a co-author with Eduardo Walker in the paper Cash Holdings and Conglomerates: Evidence from an Emerging Market.
At Universidad Diego Portales, Felipe Thomas and Carlos Soto, both master students at the masters program offered by this university, worked as research assistants for Fernando Díaz and Fernando Lefort in the papers "The Impact of External Economic Conditions on Market Efficiency: Evidence for a Small and Open Economy" and "External Risk and Firms' Leverage". As a result of this experience, they became familiar with research software and were exposed to research methodologies in the area of corporate finance.
3) Postdocs, and young researchers work

Describe in this section the research that is being done by postdocs or new young researchers. Notice that the research topics of these participants should be related to the project, but not necessarily to the same lines of its research.

Francisco Urzua, a former bachelor student in business at PUC and who is now an economics PhD student at Tilburg University, was a co-author in the papers Ownership Dynamics with Large Shareholders: An Empirical Analysis, which is forthcoming at the Journal of Financial and Quantitative Analysis, and Controlling Shareholders and Market Timing in Share Issuance, which is forthcoming at the Journal of Financial Economics. Francisco went to the US academic job market in January 2013. Borja Larrain wrote one of the letters of recommendation for his job applications explaining Francisco’s involvement in these two papers and Francisco’s contribution to their success.

Felipe Varas, a former economics student at PUC and who is now a Finance PhD student at Stanford University, was a co-author in the paper “Equity Issues and return Volatility”. Borja Larrain wrote one of the letters of recommendation for Francisco’s application to several PhD programs abroad.
VII. FORMATION OF NATIONAL NETWORKS

Use a maximum of 2 pages in this section, in order to inform about the progress of the proposed plan to establish links and networks with national institutions. You must describe the activities performed in order to achieve networks with national organizations, keeping in mind your original project and subsequent modifications, and specify the objectives related with each activity.

This project has facilitated networking among researchers of several national institutions such as the Pontificia Universidad Catolica de Chile, Universidad Diego Portales, Universidad Adolfo Ibañez, the Chilean SVS and the Central Bank of Chile.

However, the project has contributed to the creation of two corporate governance centers that have, among their fundamental goals, to create a network of people, companies and institutions committed to understand and improve corporate governance practices in Chile and Latin America.

In particular, Eduardo Walker is board member of the CGC-UC (Centro de Gobierno Corporativo-UC) which is an association between the Business School and the Law School at Pontificia Universidad Catolica de Chile. CGC-UC has obtained donations and sponsorships to finance academic activities (academic research in particular). This activity is related with the first objective (Understanding the impact of Chilean corporate governance and its consequences for firm value and performance.) and with the promotion of good laws and good practices in Chile. The activities developed by this center can be found at http://centrogobiernocorporativo.uc.cl/.

A second initiative conducive to the formation of national networks is Board, Center for Corporate Governance & Strategy. This is an initiative of Universidad Adolfo Ibañez, Universidad Diego Portales and Ernst and Young and its main purpose is to provide a place to analyze, study, share and debate about best corporate governance and strategy practices in Chilean and Latin America companies.

The motivation for establishing a Center for Corporate Governance in Chile has its origins in discussions of Universidad Diego Portales with the government, the regulator, the investment community, corporate managers, and academics from Chile. Launched in 2010 with the name of BOARD Institute for Corporate Governance & Strategy, this initiative has gained the attraction of senior managers and board members from around Latin America who, for the most part, are working in high-level positions in the private, public and third sectors and who have a keen interest in corporate governance and strategy.

In recent years, board members, senior managers, and investors from Chile and other Latin American emerging economies have been confronted with growing opportunities and challenges arising from rapidly globalizing markets for capital, products and labour. In this context, the limitations imposed by the existing offering of promotion of corporate governance best practices, support and training techniques and tools for directors, as well as research in the field, encouraged Universidad Diego Portales for establishing BOARD.

BOARD sets high standards of excellence and professionalism in the boardroom, which we at Universidad Diego Portales consider essential for business success. According to our recent market researches, there is high interest to create a corporate governance research and training offering, as well as a Latin American forum for debate to assist those directors committed to achieve high standards of excellence and professionalism in the boardroom. Analysis of these corporate issues concluded that there is an increasing demand for information and advice to directors to help their business strategy. Aspects such as corporate governance and strategy should be based on high quality, unbiased and objective, evidence-based best practices and research, as well
as business cases in which different lines of empirical and conceptual inquiries can be explored. In its research and proposals for policy, BOARD maintains independence of any particular ideological perspective.

Nowadays, BOARD is an independent Latin American Institute to support, represent and set high standards for directors. Its central concern are the consequences that the promotion of professionalism in the boardroom might have on the ability and willingness of different stakeholders -the government, the regulator, the investment community, corporate managers, and academics- to work effectively together, and the effect that this will have on business development and competitiveness. Then, one of BOARD’s primary purposes is the development of a deeper understanding of the influence of high standards for directors on the efficient operation of business and the broader society of which they form a part.

BOARD, as part of its activities, develops the following action lines:
- Bring together multidisciplinary practitioner perspectives with respect to what constitutes best practice at boardroom level;
- Engage with all sides of industry and services –including investors, board members, and senior managers– in the public, private and third sectors and with leading Latin American institutes;
- Contribute to the development of innovative strategies and techniques of corporate governance and encourage their testing and implementation in the business world;
- Disseminate best practices widely and in accessible forms through teaching, publications, research, as well as organization of and participation in seminars, conferences and other forums for debate.

In particular, BOARD organized BOARD Series, a group of meetings with CEOs and directors with the aim to talk about the role of directors in compliance, strategy, finance and leadership, as well as the perception of Chilean boards in relation to international corporate governance practices. With an initial presentation of BOARD members, this initiative continued with a private conversation and discussion of relevant experiences between directors as active board members in Chilean Companies. Some of the CEOs and directors that participated in BOARD Series came from the following companies: CAP, Cristalerías de Chile, Ripley, Salfacorp, Codelco, Grupo Inmobiliario Manquehue, Enersis, Sodimac, BCI, Grupo Mall Plaza, Moneda Assett Management, IM Trust, Megeve, Telefónica, CMPC, Marinsa, and Indumotora, among others.
VIII. INTERNATIONAL COOPERATION

Use a maximum of 2 pages in this section. Describe the activities performed by the team members, in order to establish significant links with researchers, institutions and international centers.

Exchange of students also must be informed in this section.

In July of 2012 Borja Larraín participated in the NBER’s Summer Institute on Corporate Finance in Boston, where the most recent research in the field is presented. The summer institute is a great place to interact with top researchers in the field from the U.S. and Europe.

Eduardo Walker, as board member of the Centro de Gobierno Corporativo UC, has collaborated in establishing an alliance with Stanford’s Rock Center for Corporate Governance, which involves cross-visiting by academics.

In recent years, board members, senior managers, and investors from Chile and other Latin American emerging economies have been confronted with growing opportunities and challenges arising from rapidly globalizing markets for capital, products and labour. In this context, the limitations imposed by the lack of research in the field of board practices, the poor offering of promotion of corporate governance best practices, and the reduced support and training techniques/tools for directors, have encouraged BOARD to establish a partnership with the Institute of Directors IoD, United Kingdom to deliver in Latin America the International Certificate in Company Direction, the gold standard Certificate for board members and senior managers that meet boards.

The IoD is a non party-political business organisation founded by Royal Charter in 1903, currently with around 40,000 members and more than 8,000 Certificate directors. The IoD champions the entrepreneur and seeks to provide an environment conducive to business success. For any company to prosper, directors will be continually engaged in making decisions involving innovation, risk and investment. The IoD has always been dedicated to providing directors with the information and advice they require to help their business succeed.
IX. DISSEMINATION AND OUTREACH

1) Outreach

Describe here all activities of outreach from the project (by externalizing activities, communicating results or procedures or outcomes) to other domains not related to the project discipline (general public, other professionals, basic or high school students, industry, others).

When describing these activities, describe audiences, places, institutions, participants of the project, responsible of the activity, dates, and/or objectives. In section XIV. APPENDIX, you can include a digital copy of additional material (posters, pamphlets, newspapers, chronicles, etc).

One of the key aspects of this project as stated in the original proposal was our commitment to help to improve corporate governance practices in Chile and Latin America. Thanks to the project support, we have consolidated two initiatives aiming, precisely, to reach board members, executives and other opinion leaders in order to disseminate the existing knowledge regarding corporate governance practices.

On the one hand, Eduardo Walker is board member of the CGC-UC (Centro de Gobierno Corporativo-UC) which is an association between the Business School and the Law School at Pontificia Universidad Catolica de Chile. CGC-UC has obtained donations and sponsorships to finance academic activities (academic research in particular). This activity is related with the first objective (Understanding the impact of Chilean corporate governance and its consequences for firm value and performance.) and with the promotion of good laws and good practices in Chile. The activities developed by this center can be found at http://centrogobiernocorporativo.uc.cl/. In particular, the events organized by this center can be found at http://centrogobiernocorporativo.uc.cl/eventos.

On the other hand, a second initiative conducive to the dissemination and outreach in corporate governance is Board, the initiative by Universidad Adolfo Ibañez, Universidad Diego Portales and Ernst and Young which main purpose is to provide a place to analyze, study, share and debate about best corporate governance and strategy practices in Chilean and Latin America companies.

The main activities organized by Board in order to fulfill its purpose have been:

1. **LirA Awards 2012**

   BOARD identified that although many Latin American companies were achieving excellence in their Investor Relations offering and corporate governance practices, there was not recognition of their hard work and success. In response to this BOARD launched the Latin America’s Investor Relations Awards focusing on Chile, Colombia and Peru. In partnership with Thomson Reuters Extel Surveys and Acclaro, BOARD consolidated votes of global analysts: a total of 288 votes were casted, of which 192 came from sell-side analysts, and 96 votes came from buy-side analysts of Asset Management and Brokerage firms. More than 10 Latin American countries voted, including Chile, Peru, Colombia, Mexico, Argentina, as well as countries like France, Spain, United Kingdom, United States, and Germany, among others. The awarded companies were the following: CHILE: Empresas Copec, Banco Santander Chile, Endesa Chile, LAN Airlines, Enersis, Colbún, SQM, Entel, Falabella, IM Trust, Banchile Inversiones, Cefin Capital, and Larrain Vial. PERU: Ferreyros, Cia. de Minas Buenaventura, Graña y Montero, Credicorp, Minera IRL, Credicorp, Intergroup Financial Services Corp., Alicorp, BBVA Research, BCP, and Inteligo. COLOMBIA: Ecopetrol, Grupo de Inversiones Suramericana, Bolsa Valores Colombia, ISA, Bancolombia, Isagen, Almacenes Exito, Inversiones Argos, and Serfinco.

2. **BOARD Series**
BOARD organized BOARD Series, a group of meetings with CEOs and directors with the aim to talk about the role of directors in compliance, strategy, finance and leadership, as well as the perception of Chilean boards in relation to international corporate governance practices. With an initial presentation of BOARD members, this initiative continued with a private conversation and discussion of relevant experiences between directors as active board members in Chilean Companies. Some of the CEOs and directors that participated in BOARD Series came from the following companies: CAP, Cristalerias de Chile, Ripley, Salfacorp, Codelco, Grupo Inmobiliario Manquehue, Enersis, Sodimac, BCI, Grupo Mall Plaza, Moneda Assett Management, IM Trust, Megeve, Telefónica, CMPC, Marinsa, and Indumotora, among others.

3. Professional Directors Programme

BOARD identified that although many companies have experienced directors as board members, there wasn’t a training offering focused on Latin American case studies for them. In response to this, BOARD launched the Professional Directors Programme, a two days course focused on practical case studies of Latin American companies. BOARD delivered five Professional Directors Programmes in 2011-2012, in Santiago, Chile, with the participation of more than 75 directors, managers, and consultants, from Chile, Peru, Colombia, Argentina, and Bolivia.

-Title of the course: Professional Directors Programme
Course Details: Two days course focused on practical case studies of Latin American companies. It covers local practices of corporate governance, by section 1 corporate governance theoretical framework, section 2 corporate governance legal and regulatory framework, section 3 corporate governance and its relation with strategy, and section 4 corporate governance risks and internal control.

4. International Certificate in Company Direction

BOARD identified that although many companies have professional directors as board members, there wasn’t a formal certificate offering focused on international best practice for Latin American directors. In response to this, BOARD, in partnership with the Institute of Directors IoD from the United Kingdom, launched the International Certificate in Company Direction ICCD, a unique Certificate in Latin America oriented to certify directors in corporate governance international best practices. The Institute of Directors has long been recognised as an influential and respected membership organisation worldwide. With more than 100 years' success, they are measured by their members, who are some of the most skilled and experienced business leaders, representing the full business spectrum - from start-up entrepreneurs to directors in the public sector and CEOs of multinational organisations. After 12 months of hard work and study in English language, BOARD is proud to announce that from 40 students, a group of 13 directors approved the Certificate Examination and now are part of the first generation of certified Latin American directors.

-Title of the course; Certificate in Company Direction
Course Details: Ten days course oriented to certify directors in corporate governance international best practices. It covers four keys issues in the role of directors: section 1, corporate governance, section 2 finance, section 3 strategy, and section 4 leadership. BOARD delivered two Certificate in Company Direction in 2012, in Santiago, Chile, with the participation of more than 40 directors and managers, from Chile, United States, Belgium, and Argentina.

BOARD has plans for delivering five Professional Directors Programmes and two Certificates in Company Direction in 2013, with the participation of Universidad Diego Portales and Ernst & Young members.

5. BOARD 2012 Corporate Governance Annual Survey

During November 2011 and November 2012, BOARD run a corporate governance annual survey focused on practices of board members of Chilean listed companies. The survey is broadly shared and commented by shareholders, board members, institutional investors, and other market agents, that consider its results a benchmark for corporate governance practices in Chile. The results of this survey are published annually in El
Mercurio Newspaper, and BOARD distributes a Survey Report among its key stakeholders. The Survey Report is publicly available, and can be downloaded from www.board.cl, research section called Investigacion.

6. Discussion Panel on Corporate Governance at the IoD, London
As part of Chile Day 2012 in London, BOARD organized a Discussion Panel about corporate governance practices of boards in Chile and the United Kingdom. With the participation of the Chilean delegation, as well as British directors and authorities, this activity was chaired by a BOARD member as Moderator of the Discussion Panel, and supported by Mr. Felipe Larrain, the Ministry of Finance of Chile, which participated in this activity. This BOARD initiative was hosted in London by the Institute of Directors IoD, with the collaboration of BOARD, and the support of InBest, the organizer of Chile Day 2012.
2) Knowledge transfer

This section must be filled up only by those projects formulated under OPEN modality. Include here information generated by members of your team, that may have applications value or that has been or may be transferred to other professionals or areas or institutions in which it can be used. These may be information procedures, results or conclusions that have arisen from your research in that may be used or applied in public sectors, economic or private areas or any focalized and specific actions. Please, when making this description, include the type of information transfer, the sector of domain to which it has been transferred, the name of the people involved, and, if applies, the dates in which this has occurred.

As explained in the Application to this project, information is the single most important factor of a good corporate governance system. This project aimed to contribute to the improvement of information standards and self-regulatory practices in Chilean capital markets.

In our proposal we planned to organize an “Observatory of the Chilean Corporation” that will gather, organize and make available public information on Chilean corporations. The information will be organized and stored in a public-access website.

During the second year of the project we made a key progress in this direction. We have identified that although many Latin American companies are achieving excellence in their Investor Relations offering and corporate governance practices, to date, there has been very little recognition of their hard work and success. In response to this we have launched a new Latin American Investor Relations Awards focusing on Chile, Colombia and Peru with the aim of achieving the following:

- Provide access to high quality information regarding corporate governance practices in Chile, Colombia and Peru.
- Foster the integration of the three countries capital markets.
- Raising the international profile of Latin America's investment community.
- Giving recognition to Latin American companies and professionals who are achieving excellence in Investor Communications.
- Bringing the Latin American Investor Relations community together to share and grow their knowledge and experiences.
- Setting standards for best practice in Investor Relations and Corporate Governance.
- Opportunity for the investment community from Chile, Colombia and Peru to network and spread best practice.

For this project, Board conducted research on over 800 listed companies in Chile, Peru and Colombia. The methodology, results and identity of the partners have been made public through the public-access website www.lirawards.com. This domain is property of Board and is administered by the Center executive secretariat.

The information generated through the research was used by a Selection Panel as part of their deliberations in order to rank companies in the region based on corporate governance communication practices. The Selection Panels received a shortlist generated by a Thompson Reuters Poll along with Board research on those companies to support decision making in specific categories.

The research process consisted in evaluating the investor relations and communication of corporate governance practices of a nominated group of listed companies from Chile, Colombia and Peru, according to the following categories:
The research included the review of the investor relations section of corporate websites, quarterly financial results, Annual Reports, Annual General Meeting agendas and minutes, and other publicly available information of the nominated companies. In this process participated a research team constituted by research assistants Javier Andreu, Felipe Cuevas and Yorgo Dionizis, all of them coordinated by the Professor Christian Espinosa, and supported methodologically by Mr. German Heufemann.

The results suggested a corporate governance structure in a growing stage for listed companies among the researched countries. Chile and Colombia showed, in general terms, more and better relation investors and communication of corporate governance practices than Peru. The results were tabulated for their presentation at the members of the Selection Panel, a group of independent experts who will decide the winners for each of the categories named above.

During the final period of the project we launched, under the Board Monitor brand, a unique online observatory for best investor relations (IR) and corporate governance practices in Latin American companies. It provides objective and relevant governance information, in an easily comparable database. It uses publicly available information, in order to analyze, promote and communicate the status of IR and corporate governance practices by companies. Up to date, BOARD Monitor has registered data from Chile, Peru and Colombia, which show the state-of-the-art and advances made by a number of listed companies in the disclosure of their IR and corporate governance practices. BOARD Monitor provides research into the Chilean, Colombian and Peruvian listed companies. It covers international best practices in 10 categories, which overall results are expressed through the Research Rankings and the Perception Rankings. Some of the Research Rankings are Communication of Corporate Governance, Investor Relations Annual Report, Investor Relations Website, and Communication of Financial Results. Some of the Perception Rankings are Head of Investor Relations, Investor Relations Department, Financial Institution in Terms of Research, Investor Relations by CEO, Investor Relations by CFO, and Financial Analyst.

Board Monitor is made public through the Board webpage and acknowledges the support of the SOC-04 project.
X. PLAN FOR TRANSFER RESULTS AND KNOWLEDGE TO PUBLIC ENTITIES

This section must be filled up only by those projects formulated under INNOVATIONS ON PUBLIC POLICIES modality.

You must include information about the progress of the plan for the transfer of results and knowledge to public entities presented in your original proposal. Indicate the accomplishment of the objectives and the state of the activities originally planed. Keep in mind your original project and all suggestions made by the reviewers.
XI. LESSONS LEARNED

The following section can be used in case of available information related to the possible difficulties, inconveniences or similar issues in the management of the project within the host institution, associated institutions, CONICYT, institution and researchers or any other combination of participants and activities involved. The idea is to resolve these issues on behalf of better practices in the current and future handling of these initiatives.

Information provided in this section must be concise, stating all variables involved and outcomes. Do not extend further than 2 pages. Remember that this information is confidential.

In general terms, the project has been implemented according to our expectations and we have been able to achieve the goals stated in our proposal.

We have, however, faced some difficulties related to the change of the host institution as a result of the project director moving from PUC to UDP. The difficulties were mostly administrative and have caused a slight delay in the project. On the other hand, however, the inclusion of a new host institution made possible the establishment of new national and international networks through the Board, a joint initiative with Universidad Adolfo Ibañez and E&Y.

During this process we were supported by Conicyt. PIAS was able to relax some of the deadlines involved and assist us in the formal procedures.
XII. INDICATORS OF THE PERIOD INFORMED

The following Table contains indicators for the period informed in this report (around 12 months of operations). This information must be consistent with the information available in the report.

This program recognizes the limited utility of this kind of indicators, and the fact that they do not cover most of the actual impact of your activities. Nevertheless, you can fill “N/A” in those cases in which the indicators do not apply to your project.

If you presented your own indicators in the original proposal, specifically in the sections Formation of National Networks and International Cooperation; you must include them at the end of this table.

In addition, if you require or would like to define indicators particular to your activities, results or impact at this point, also include them at the end of this table, following the already mentioned in your original project.

<table>
<thead>
<tr>
<th>DEVELOPMENT AREAS</th>
<th>INDICATORS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Number of main researchers.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Female gender (%) of main researchers.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Number of associated researchers.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Female gender (%) of associated researchers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of the project costs contributed by non-governmental sources.</td>
<td>65</td>
</tr>
<tr>
<td>Scientific production</td>
<td>Number of ISI publications(^1).</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Number of non ISI publications(^2).</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Annual average impact index of the journals in which the project researchers publish.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of presentations in congress/conferences abroad.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Number of presentations in congress/conferences attended in Chile.</td>
<td>2</td>
</tr>
<tr>
<td>Human capital formation and training</td>
<td>Number of undergraduate students(^3).</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Female (%) of undergraduate students.</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Number of Master's students.</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Female (%) of Master's students.</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Number of Ph.D. students.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Female (%) of Ph.D. students.</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Number of postdocs participating in the project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female (%) of postdocs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of undergraduate theses finished.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Number of graduate theses finished (Master).</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Number of graduate theses finished (Ph.D.).</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Please save all the documentation pertinent to verify the information from the tables.

\(^1\) Accepted, in press or published.

\(^2\) Accepted, in press or published.

\(^3\) Only consider students funded with resources from this project.
## DEVELOPMENT AREAS

### INDICATORS FOR PROJECT IN INNOVATIONS ON PUBLIC POLICIES MODALITY

This table must be filled in only by those projects formulated under **INNOVATIONS ON PUBLIC POLICIES** modality. You must indicate here those indicators that allow evaluate the achievements related with the plan of transfer of results and knowledge to public entities. Also include here indicators of the results achieved in establishing links with public and/or private entities, in order to potentially facilitate the implementation of innovations in public policies.

<table>
<thead>
<tr>
<th>Name of Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public organizations interested in the Project progress</td>
<td>5</td>
</tr>
<tr>
<td>Other activities in collaboration with entities responsible of defining public policies (specify)</td>
<td>1</td>
</tr>
<tr>
<td>If you have indicators originally not included in the original proposal, you may add them here.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Please save all the documentation pertinent to verify the information from the tables.

4 Researchers not receiving resources from this project.

5 Main, associated researchers and postdocs.

6 Activities organized by the research team. Do not consider students.

7 Presentations, courses and any other initiatives with focus on the community (schools, ethnic communities, neighbors’ associations, other)
XIII. APPENDIX

In this section you can include the requested documents in section VI. PUBLICATIONS (a copy of letters or email messages confirming acceptance of the papers not yet published, a digital copy of published papers and papers that have been formally accepted for publication) as well as all documentation that you consider that adds value to the presentation of results.

In the printed version of this report, do not include copies of this section. The digital copy of this section satisfies the requirement.