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Initial Public Offerings: Is There Money Left on the Table? Comparative Study of the Top Five IPOs in Poland and the United States

Introduction

Initial public offerings (IPO) have been attracting remarkable public attention since the late 1990s, especially during the dotcom bubble years. Despite their positive role in creating new companies, IPOs have been connected with many controversies and unsolved questions. Because of that, IPOs have been a subject of significant academic attention, and most articles have been focused on the major issues relating to: hot markets, underpricing, and long-run performance.

This paper presents a theoretical overview, supported by an empirical study, based on the largest IPOs in Poland and the US, between 2000 and 2005, focusing on the underpricing and the long-run performance phenomenon. The observed period was chosen particularly in order to avoid the dotcom bubble and the financial crises years. Thus, the period was chosen in order to avoid the data being affected by the positive effects of the dotcom bubble, characterized by spectacular returns, as well to avoid the data being affected by the negative effects of the financial crises, characterized by a significant and sudden decrease in the stock market capitalizations.

Poland was chosen for the study because of its remarkable performance during the crisis, and because of the fact that Poland has built a successful financial sector, which has gained the importance extending beyond the national level. The US was, on the other hand, chosen because it remains the biggest IPO market in the world. Between 2008 and 2011, Polish economy grew by 15.7%, while the average growth for the European Union was –0.5%. Poland has a very successful stock exchange – the Warsaw Stock Exchange (WSE), which accounts for more than a half of the central Europe's share trading vol-

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ume. Therefore, the Polish stock exchange provides an appropriate framework, as well as sufficient liquidity, to attract not only Polish companies, but also big regional players.

The empirical evidences and the results confirm the presence of the "leaving money on the table" hypothesis, in both countries. However, in the analysis of the long-term performance, the findings are not, especially in the case of the US companies going public, in accordance with the related results of the main academic research. Namely, the findings do not support the long-term underpricing phenomenon.

An initial public offering is a financial event, and its importance is greater than just the importance for the company going public. It can be a major tool for developing financial markets and conducting privatization. Thus, many successful IPO stories are linked to the emerging and developing markets. Although the US market is still the largest market for IPOs, interestingly, the largest IPO, in history, was not the one of a U.S. company. In fact, the Chinese Agricultural Bank in 2010 raised a record setting $22.1 billion. As far as the Polish IPO market goes, the largest IPO in 2010 in Europe, was Powszechny Zakład Ubezpieczeń (PZU). The size of the IPO markets in Poland and the US from 2000 to 2005 are presented in the Tables 1 and 2 below.

Table 1

The US IPO Data (1.1.2000–31.12.2005)

	2000	2001	2002	2003	2004	2005
Number of firms	139	48	45	60	138	146
IPO size ($ million)	17,120.6	24,971.8	6,103.7	8,272.9	25,012.8	26,373.4

Source: Bloomberg, 2012

Table 2

Poland IPO data (1.1.2000–31.12.2005)

	2000	2001	2002	2003	2004	2005
Number of firms	8	4	1	4	23	27
IPO size ($ million)	435.3	55.8	20.0	312.1	8,230.1	6,099.4

Source: Bloomberg, 2012

The mechanism of how IPOs are conducted is also important for the discussion. The pressure arises from the structural conflict of interest between the three main parties in the IPO process: the issuing firm, the investment bank responsible for underwriting the offering, and the investors. The mechanisms of how the stocks are priced and allocated to investors are defined by national regulations and rules.

Selecting the appropriate underwriter is essential for a successful IPO. In the case of small and young companies, the reputation and experience of the underwriter can be a very important factor for potential investors in an IPO. Kleeburg (2005) suggested that the preliminary evaluation of a company's investment bankers, auditors, and lawyers, had to include the following criteria: experience, reputation, syndication, distribution capacity, and the aftermarket support. The following data depict the size of the underwriters market. From 1.1.2000 to 31.12.2005, there were 150 underwriters in the US, which managed to conduct 3,590 issues and generate a fee income of $701,147.24 million, or 6.34% fee on average[1].

[1] Bloomberg Underwriter Rankings (2012) – Market – U.S. Equity Offerings.

In EMEA (Europe, Middle East, and Africa), there were 334 underwriters responsible for 2,558 issues. They charged, on average, 3.27% fee, and generated $655,229.37 million in income[2].

1. Theoretical Background

Over the years, the substantial research on the IPO performance has been conducted. The well-documented three "anomalies" of IPOs are: underpricing, hot issue markets, and long-run performance. The short run underpricing of IPOs has been well-documented, but the long-run IPOs performance has not. In the case of the underpricing, money is clearly "left on the table", since the investors would have been ready to buy the same stocks at a higher price. When the degree of the underpricing is higher, companies going public receive less money for selling stocks to the market, raising the cost of capital of those firms. However, the threat of overpricing is also an important issue. If a stock is offered to the public at a higher price than the market would be ready to pay for it, it puts the underwriters in a tough position to fulfill the undertaken commitment to sell the stocks. Moreover, the danger of a price decline in the stock value, on the first day of trading, is high even if the underwriter has managed to sell all of the issued stocks.

The underpricing of initial public offerings has been well observed in different markets, and in different time periods. Ibbotson (1975) analyzed the initial and aftermarket performance of the newly issued IPOs during the 1960s. The results confirmed that new issue IPOs were underpriced or "aftermarket efficient", meaning that the initial average performance was positive, or that the starting prices were 11.4% higher than the offering prices. Ritter (1984) observed around 5,000 firms, which went public during the period from 1960 to 1982 in the US, and concluded that their stocks, shortly after the public trading started, traded at the prices. 18.8% higher than the offering prices. Also, according to Rock (1986), the issuer must underprice the shares in order to attract uninformed investors. On the other hand, Beatty and Ritter (1986) argued that there was a stable relationship between the expected underpricing of an IPO and the ex-ante unpredictability of its value (or as they called it, "ex-ante uncertainty").

Liu and Ritter (2011) concluded that, despite the large number of investment banking firms, the IPO underwriting market is characterized as a local oligopoly, mainly because the issuers favor non-price elements. They revealed that IPOs were more underpriced if the underwriters had better quality of service, or if they had more industry experience. Furthermore, Engelen and Essen (2010) used a large dataset of 2,920 IPOs, from 21 countries, from the period 2000–2005, in order to observe the impact of legal and institutional conditions on the IPO underpricing. Generally, the underpricing of IPOs occurred worldwide. However, specific characteristics contribute to 10% of the variation in the level of underpricing. More interestingly, they found that companies going public, in a country with an advanced legal system (i.e. better investor protection, quality and level of legal enforcement, etc.), on average, left less "money on the table" while undertaking IPOs. Lastly, Rajan and Servaes (1997) studied a sample of IPOs, between 1975 and 1987, and examined the effect of the analysts following IPOs. They find that a "higher underpricing leads to an increased following". The main point here is that if a company spent more time preparing for an IPO, a greater number of analysts followed the issue.

[2] Bloomberg Underwriter Rankings (2012) – Market – EMEA Equity Offerings.

2. Empirical Analysis and Findings

The data for the research consists of the secondary data, mainly: the IPO data, equity prices data, and the benchmark indexes values. The data was extracted from the Bloomberg IPO database. The main criteria, for the sample selection, were that all the companies went through an IPO, from 1.1.2000 to 31.12.2005, and that the companies were listed on the Polish and the US stock exchanges. The data was arranged in order to select the five largest IPOs (using the following criteria: the number of the offered shares times the price of the offered shares) in both countries, per year.

The benchmark indexes were selected in order to find out whether an investing in an IPO, or alternatively, in a chosen benchmark index, would be a better option from the financial standpoint. The indexes were influenced by various factors, such as different economic cycles and country specific economic fundamentals, but in general, one can discover the common trends and periods of significant correlation which is, of course, the outcome of the economic globalization and integration. The following Indexes had been chosen: the Standard and Poor's. 500 Index (SPX Index USD) – a capitalization-weighted index of US 500 stocks, and the Warsaw Stock Exchange WIG INDEX – a total return index, which includes all companies listed on the main market, excluding foreign companies and investment funds.

The analysis of the IPO's first day of trading performance is measured by an increase in the share price, from the offer to the closing price, at the first trading day. The "money left on the table" amount is calculated as the nominal price increase on the first day of the trading times the number of the offered shares. The long term IPO share performance was compared to the relevant benchmark index, calculated in the same way. Basically, the first three years' performance was calculated as follows:

$$\text{Return} = (\text{EEP} - \text{BEP})/\text{BEP},$$

where:
EEP – ending equity/benchmark price (after three years closing equity/benchmark price)
BEP – beginning equity/benchmark price (first day of trading closing equity/benchmark price)

The underpricing of initial public offerings (IPO) has been well-documented, thus it has been expected that the findings would support the assumption. Indeed, the results are significantly aligned with the empirical evidence. The following Table 3 shows the summary of the identified biggest IPOs in Poland and the US, from 2000 to 2005 (for more details, please see Appendix 1 for Poland, and Appendix 2 for the US).

It appears that, on average, the IPO companies observed, both in Poland and the US, are underpriced (except for Poland in 2000). On average, in Poland, the percentage change in price, at the end of the first trading day, was. 4.96 while, in the US, the change was higher (6.14). These findings, in general, are not in conflict with the older studies and empirically support the existence of the under-pricing phenomenon. In Poland, the biggest underpricing IPO, in terms of the percentage of the price change on the first day of trading, was MCI Management S.A.'s IPO. The share price, measured as a difference between the offering price and the first day closing price, increased by 33%. The biggest amount "left on the table", in Poland, was attributed to the Grupa LOTOS S.A.'s IPO, where the amount was 3 045 000 000 PLN.

In the US, the most significant fist day positive return was in relation to the Provident Financial Services Inc.'s IPO, where the first day return was. 53%. Therefore, it was also

Table 3

Poland and the US: Money Left on the Table – Summary

Country / Year	Poland		US	
	% change 1st day	Money left on the table*	% change 1st day	Money left on the table*
2005	6.45%	4,148,980.126	1.37%	94,800.891
2004	4.07%	938,155.177	5.14%	361,722.551
2003	9.23%	13,970.000	16.93%	433,572.475
2002	3.00%	599.850	1.91%	56,010.593
2001	9.74%	10,767.501	6.98%	693,000.000
2000	–2.69%	–7,680.250	4.49%	171,072.513

* Local currency.

Source: Bloomberg, 2012.

the case of the biggest amount of the "money left on the table" in the observed sample – 312 996 075 USD. The Google Inc.'s IPO, in 2004, is another example of a company going public receiving less money than it would have been in the case of a higher offering share price. In this case, Google Inc. failed to raise additional 294 272 551 USD of capital. Although it is not focus of the study, the above mentioned cases can support the thesis that the underpricing phenomenon occurs across different industries, countries, and time periods. In order to avoid a possibility of making inadequate conclusion, due to the influence of an IPO size on the calculation of the average performance, Table 4 shows the first day trading performance by the number of companies:

Table 4

Poland and US: Short Term Performance by Number of Companies – Summary

Country / Year	Poland			US		
	No. of underpriced IPOs	No. of overpriced IPOs	No. of neither over or underpriced	No. of underpriced IPOs	No. of overpriced IPOs	No. of neither over or underpriced
2005	4	1		2	1	2
2004	3	2		4	1	
2003	2	2		3		2
2002	1			2	3	
2001	4			5		
2000	1	3		3	1	1
Total	**15**	**8**	**0**	**19**	**6**	**5**

Source: Bloomberg, 2012.

The results show that, in both countries, the number of companies which had "left money on the table" was larger than the number of companies which had their share prices decreased or stayed the same at the end of the first trading day.

The long term analysis measures the performance of the sample shares for the first three years of trading in the way described above[3]. Table 5 shows the three-year performance of the IPO shares and the related indexes, as measured by the percentage change between the first trading day closing price and the three years later (same date) trading day closing price. The three-year difference measures the gap between the price changes of the shares and the related benchmark index. The positive sign signals that the IPO is overpriced relative to the benchmark index, while the negative sign shows an underperformance.

Table 5

Poland US Long-Term Performance

Country / Year	Poland			US		
	IPO 3Y change	Index 3Y change	Difference 3Y	IPO 3Y change	Index 3Y change	Difference 3Y
2005	98.07%	45.34%	52.73%	33.00%	13.61%	19.40%
2004	188.25%	126.71%	61.54%	144.96%	30.62%	114.34%
2003	107.00%	154.18%	–47.18%	40.81%	31.97%	8.85%
2002	152.43%	82.59%	69.84%	218.19%	35.61%	182.58%
2001	221.57%	51.99%	169.58%	63.63%	–1.69%	65.32%
2000	–59.74%	–10.45%	–49.29%	29.76%	–32.98%	62.74%
Total	**117.93%**	**75.06%**	**42.87%**	**88.39%**	**12.85%**	**75.54%**

Source: Bloomberg, 2012.

Generally, the long term performance of IPO companies was satisfying, meaning that the IPO share prices, both in Poland and the US, were rising (except for the Poland 2000's IPOs). The performance of the Polish companies was better that of the US counterparts. However, the observed IPO companies underperformed (in comparison to the related benchmark index) only in Poland, for the years. 2000 and 2003. In all other cases, an investor would have been better off investing in an IPO, for the 3 year period, then investing in a vehicle that mimics the benchmark index. If one observes the IPO companies' performances, in terms of a number of companies belonging to a group of under- or overperformers relating to the relevant benchmark index, one will find the results presented in Table 6.

Table 6 shows that, in the case of Poland, 14 companies underperformed, in comparisons to 10 companies which overperformed. This is a contradicting observation, which is based on the average returns. Basically, in this case, the one more year's IPOs in Poland show underperformance in addition to 2000 and 2003. That was the case of the 2001's IPOs. However, in the case of the US, in every observed year there were more overperforming IPOs. The return for an investor in the Polish IPO companies over this time period, would have been 157% of the return, which would have been earned by investing in a product that would mimic the benchmark index performance. In the US, the findings are even more striking – the return would have been 687%.

The best performer among the Polish companies was LPP S.A., whose share price had increased 981% over the first three years of the trading period. In the US, the winner

[3] In Appendices. 3 and 4 there are information about 3 year returns for each analyzed company.

Table 6

Poland and the US: Long Term (3Y) Performance – Number of Companies Summary

Country / Year	Poland		US	
	No. of underperformed IPOs	No. of overperformed IPOs	No. of underperformed IPOs	No. of overperformed IPOs
2005	2	3	2	3
2004	1	4		5
2003	3	1	2	3
2002		1		5
2001	3	1		5
2000	5	0	1	4
Total	**14**	**10**	**5**	**25**

Source: Bloomberg, 2012.

among the observed IPO companies was Google Inc., whose shares rocketed for 398%. The findings emphasize that the long term IPO performance was not proved to be inferior to the alternative performance index. However, this is not in accordance with the long term overpricing phenomenon, which has been documented in many studies.

Conclusion

The work analyzed two phenomena relating to the IPO markets: short- and long-run market performance of the biggest IPOs in Poland and the US. The research and analysis observed the first-day and the three year trading returns of 53 IPOs from 2000 to 2005. The findings verified the existence of a significant amount of money "left on the table".

The computed arithmetic mean for both countries suggests that the underpricing was equal to 5.55%. The results of the long-run performance failed to show a correspondence with the previous studies. In fact, the results showed the overperformance of IPOs relative to the benchmark indexes, especially in the case of the US.

Nevertheless, this work can encourage and provoke further research studies and discussions in Poland. The remarkable economic achievement of Poland deserves to be the subject of further research, and the Polish case could be an important lesson not just for the developing countries, but also for the developed ones. A further investigation could be focused on the relationship between the IPO market and the economic growth.

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Appendix 1

IPOs in Poland (2000–2005): The First Trading Day Performance

Currency: PLN

Short name	Ticker	IPO data	IPO share price	IPO shares Offered	IPO size	First day closing price	Net change 1st day	% change 1st Day	Money left on the table
2005									
PGNIG	PGN PW Equity	2005-09-23	3,60	2,682,000,017	9,655,200,062	3,46	–0,14	–4%	–375.480.002
LOTOS	LTS PW Equity	06/0912005	29,00	1,015,000,000	29,435,000,000	32,00	3,00	10%	3.045.000.000
PULAWY	ZAP PW Equity	2005-10-19	53,40	297,810,000	15,903,054,000	53,60	0,20	0%	59.562.000
CIECH	CIE PW Equity	2005-02-10	20,47	277,317,600	5,676,691,272	25,25	4,78	23%	1.325.578.128
AMREST HOLDINGS	EAT PW Equity	2005-04-27	24,00	188,640,000	4,527,360,000	24,50	0,50	2%	94.320.000
2004									
PKOBP	PKO PW Equity	2004-11-10	18,92	377,000,000	7,132,840,000	21,41	2,49	13%	938.730.000
TVN	TVN PW Equity	2004-12-07	6,34	14,512,200	92,007,348	6,97	0,63	10%	9.142.686
GTC	GTC PW Equity	2004-05-06	7,97	4,920,700	39,217,979	8,47	0,50	6%	2.460.350
SYNTHOS	SNS PW Equity	2004-12-20	0,58	9,746,653	5,653,059	0,57	–0,01	–2%	–97,467
PEKAES	PEK PW Equity	2004-11-26	10,25	16,107,190	165,098,698	9,50	–0,75	–7%	–12.080.393
2003									
IMPEL	IPL PW Equity	2003-11-14	28,00	6,200,000	173,600,000	27,00	–1,00	–4%	–6.200.000
KOFOLA	KFL PW Equity	2003-08-06	21,60	3,000,000	64,800,000	29,30	7,70	36%	23.100.000
SNIEZKA	SKA PW Equity	2003-12-31	29,50	2,100,000	61,950,000	28,00	–1,50	–5%	–3.150.000
DUDA	DUD PW Equity	2003-01-30	1,11	2,000,000	2,220,000	1,22	0,11	10%	220,000
2002									
EMPERIA	EMP PW Equity	2002-01-03	15,00	1,333,000	19,995,000	15,45	0,45	3%	599,850
2001									
MCI	MCI PW Equity	2001-02-01	6,00	5,200,000	31,200,000	8,00	2,00	33%	10.400.000
GETIN	GTN PW Equity	2001-05-10	0,43	6,000,000	2,580,000	0,44	0,01	2%	60,000
LPP	LPP PW Equity	2001-05-16	48,00	300,000	14,400,000	48,40	0,40	1%	120,000
TRION	TIN PW Equity	2001-07-17	13,48	568,184	7,659,120	13,81	0,33	2%	187,501
2000									
KOGENERA	KGN PW Equity	2000-05-26	52,00	3,924,000	204,048,000	52,50	0,50	1%	1.962.000
MCLOGIC	MCL PW Equity	2000-05-31	105,00	1,479,050	155,300,250	100,00	–5,00	–5%	–7.395.250
ZPUE	PUE PW Equity	2000-08-08	24,00	940,000	22,560,000	23,80	–0,20	–1%	–188,000
TALEX	TLX PW Equity	2000-11-20	32,90	710,000	23,359,000	30,00	–2,90	–9%	–2.059.000
ULMA	ULM PW Equity	2000-05-21	12,50	1,200,000	15,000,000	12,50	0,00	0%	0

Source: Bloomberg, 2012.

Appendix 2

IPOs in the US (2000–2005): The First Trading Day Performance

Currency: USD

Short name	Ticker	IPO date	IPO share price	IPO shares offered	IPO size	First day closing price	Net change 1st day	% change 1st day	"Money left on the table"
2005									
HUNTSMAN CORP	HUN US Equity	2-10-2005	23	60,227,276	1,385,227,348	24,5	1,50	7%	90,340,914
LAZARD LTD-CL A	LAZ US Equdy	5-4-2005	25	34,183,164	854,579,100	25	0,00	0%	0
CELANESE CORP-A	CE US Equity	1-20-2005	16	50,000,000	800,000,000	16	0,00	0%	0
KKR FINANCIAL HO	KFN US Equity	6-23-2005	23,4832	33,333,302	782,772,598	24 217	0,73	3%	24,459,977
WRIGHT EXPRESS	WXS US Equity	2-15-2005	18	40,000,000	720,000,000	17,5	-0,50	-3%	-20,000,000
2004									
GENWORTH FINANCI	GNW US Equity	5-24-2004	19,5	145,000,000	2,827,500,000	18,75	-0,75	-4%	-108,750,000
ASSURANT INC	AIZ US Equity	2-4-2004	22	80,000,000	1,760,000,000	23,75	1,75	8%	140,000,000
GOOGLE INC-CL A	GOOG US Equity	8-18-2004	85	19,605,100	1,666,433,500	100,01	15,01	18%	294,272,551
APOLLO INV CORP	AINV US Equity	4-5-2004	15	62,000,000	930,000,000	15,41	0,41	3%	25,420,000
ASSURED GUARANTY	AGO US Equity	4-22-2004	18	49,000,000	882,000,000	18,22	0,22	1%	10,780,000
2003									
MPG OFFICE TRUST	MPG US Equity	6-24-2003	19	36,510,000	693,690,000	19	0,00	0%	0
PROVIDENT FINANC	PFS US Equity	1-15-2003	10	59,618,300	596,183,000	15,25	5,25	53%	312,996,075
AXIS CAPITAL	AXS US Equity	6-30-2003	22	21,500,000	473,000,000	25,5	3,50	16%	75,250,000
FIRST TST VL DVD	FVD US Equity	8-27-2003	11,4754	30,000,000	344,262,000	11,4754	0,00	0%	0
CAPITALSOURCE IN	CSE US Equity	8-6-2003	13 091	21,300,000	278,838,300	15	2,13	16%	45,326,400
2002									
SEAGATE TECHNOLO	STX US Equity	12-10-2002	11,4129	72,500,000	827,435,250	10,94	-0,48	-4%	-34,466,500
PLATINUM UNDERWR	PTP US Equity	10-28-2002	22,5	30,040,000	675,900,000	25	2,50	11%	75,100,000
WYNN RESORTS LTD	WYNN US Equity	10-25-2002	9,7153	34,615,000	336,295,110	9,7135	0,00	0%	-62,307
LIN TV CORP-CL A	TVL US Equity	5-2-2002	22	17,000,000	374,000,000	23	1,00	5%	17,000,000
ENBRIDGE ENERGY	EEQ US Equity	10-10-2002	9,0171	9,000,000	81,153,900	8,8437	-0,17	-2%	-1,560,600

2001									
KRAFT FOODS INC	KFT US Equity	6-12-2001	31	280,000,000	8,680,000,000	31,50	0,50	2%	140,000,000
PRUDENTL FINL	PRU US Equity	12-12-2001	27,5	110,000,000	3,025,000,000	29,10	1,60	6%	176,000,000
PRINCIPAL FINL	PFG US Equity	10-22-2001	18,5	100,000,000	1,850,000,000	20,50	2,00	11%	200,000,000
WELLPOINT INC	WLP US Equity	10-29-2001	18	48,000,000	864,000,000	20,25	2,25	13%	108,000,000
ACCENTURE PLC-A	ACN US Equity	7-18-2001	14,5	115,000,000	1,667,500,000	15,10	0,60	4%	69,000,000
2000									
METLIFE INC	MET US Equity	4-4-2000	14,25	202,000,000	2,878,500,000	14,50	0,25	2%	50,500,000
GENERAL DYNAMICS	GD US Equity	9-25-2000	26,0625	15,049,400	392,224,988	25,50	-0,56	-2%	-8,465,288
ENTRAVISION CO-A	EVC US Equity	8-1-2000	15,8734	46,000,000	730,176,400	17,9177	2,04	13%	94,037,800
MONSANTO CO	MON US Equity	10-18-2000	10	35,000,000	350,000,000	11,00	1,00	10%	35,000,000
PACKAGING CORP	PKG US Equity	1-27-2000	12	46,250,000	555,000,000	12,00	0,00	0%	0

Source: Bloomberg, 2012.

Appendix 3

IPOs in the US (2000–2005): Long-term (3Y) Performance vs. WIG Index (3Y) Performance

Currency: PLN

Short name	Ticker	IPO date	First day closing price	Index IPO date	IPO date + 1Y	IPO share price +1Y	IPO date + 2Y	IPO share price +2Y	IPO date + 3Y	IPO share price +3Y	Index IPO date +3Y	IPO 1Y change	IPO 2Y change	IPO 3Y change	Index 3Y change	Difference 3Y
2005																
PGNIG	PGN PW Equity	2005-09-23	3,46	33.223.87	2006-09-25	3,18	2007-09-24	5,27	2008-09-23	3,16	37.405.6	-8,1%	52,3%	-8,7%	12,6%	-21,3%
LOTOS	LTS PW Equity	2005-06-09	32,00	27.521.19	2006-06-09	46,6	2007-06-11	48,65	2008-06-11	31,69	45.029.57	45,6%	52%	-1%	63,6%	-64,6%
PULAWY	ZAP PW Equity	2005-10-19	53,60	31.271,90	2006-10-19	56,4	10/1912007	123,1	2008-10-20	61	28.670.13	5,2%	129,7%	13,8%	-8,3%	22,1%
CIECH	CIE PW Equity	2005-02-10	25,25	26.877.29	2006-02-10	31,65	2007-02-12	67,31	2008-02-11	83,6	47.942.35	25,4%	166,6%	231,1%	78,4%	152,7%
AMREST HOLDINGS	EAT PW Equity	2005-04-27	24,50	25.939,43	2006-04-27	49,1	2007-04-27	96,5	2008-04-28	87	46.807,86	100,4%	293,9%	255,1%	80,5%	174,7%
2004																
PKOBP	PKO PW Equity	2004-11-10	21,41	25.521.35	2005-11-10	26,39	2006-11-10	38,02	2007-11-12	48,26	57.244.48	23,3%	77,6%	125,4%	124,3%	1,1%
TVN	TVN PW Equity	2004-12-07	6,97	26.067,84	2005-12-07	14,5	2006-12-07	24,17	2007-12-07	25,26	58.635.79	108%	246,8%	262,4%	124,9%	137,5%
GTC	GTC PW Equity	2004-05-06	8,47	23.919.38	2005-05-06	11,1	2006-05-08	27,5	2007-05-07	50,2	61.283.82	31,1%	224,7%	492,7%	156,2%	336,5%
SYNTHOS	SNS PW Equity	2004-12-20	0,57	26.476,65	2005-12-20	0,51	2006-12-20	1,07	2007-12-20	1,38	55.309.84	-10,5%	87,7%	142,1%	108,9%	33,2%
PEKES	PEK PW Equity	2004-11-26	9,50	25.268.42	2005-11-28	7,85	2006-11-27	17,3	2007-11-26	1,77	55.385.73	-17,4%	82,1%	-81,4%	119,2%	-200,6%
2003																
IMPEL	IPL PIN EquityEquity	2003-11-14	27,00	20.425.08	2004-11-15	10,25	2005-11-14	12,5	2006-11-14	20,99	48.900.38	-62,00%	-53,7%	-22,3%	139,4%	-161,7%
KOFOLA	KFL PW Equity	2003-08-06	29,30	17.877,71	2004-08-06	13,9	2005-08-08	11,05	2006-08-07	18,6	43.648,70	-52,6%	-62,3%	-36,5%	144,2%	-180,7%
SNIEZKA	SKA PW Equity	2003-12-31	28,00	20.820.07	2004-12-31	27,1	2006-01-02	27,3	2007-01-02	39,9	51.927,09	-3,2%	-2,5%	42,5%	149,4%	-106,9%
DUDA	DUD PW Equity	2003-01-30	1,22	13.783,66	2004-01-30	3,33	2005-01-31	7,78	2006-01-30	6,64	39.109,05	173,00%	537,7%	444,3%	183,7%	260,5%
2002																
EMPERIA	EMP PW Equity	2002-01-03	15,45	14.628.00	2003-01-03	15,05	2004-01-03	31	2005-01-05	39	26.709.54	-2,6%	100,7%	152,4%	82,6%	69,8%
2001																
MCI	MCI PW Equity	2001-02-01	8,00	17.642.63	2002-02-01	1,16	2003-02-03	0,38	2004-02-02	1,4	22.227.67	-85,5%	-95,3%	-82,5%	26,0%	-108,5%
GEM	GTN PW Equity	2001-05-10	0,44	14.974,76	2002-05-10	0,1	2003-05-12	0,17	2004-05-10	0,65	22.962,68	-77,3%	-61,4%	47,7%	53,3%	-5,6%
LPP	LPP PW Equity	2001-05-16	48,40	14.854.67	2002-05-17	92,2	2003-05-16	334	2004-05-17	523	22.743.79	90,5%	590,1%	980,6%	53,1%	927,5%
TRION	TIN PW Equity	2001-07-17	13,81	13.451,47	2002-07-18	21,64	2003-07-17	8,81	2004-07-19	5,59	23.611,95	56,7%	-36,2%	-59,55%	75,5%	-135,1%
2000																
KOGENERA	KGN PW Equity	2000-05-26	52,5	18.356.7	2001-05-28	48,2	2002-05-27	22,1	2003-05-26	14,65	15.099,64	-8,2%	-57,9%	-72,1%	-1,77%	-54,4%
MCLOGIC	MCL PW	2000-05-31	100,00	19.570.5	2001-05-31	21,3	2002-05-31	9,25	2003-06-02	7,4	15.250,08	-78,7%	-90,8	-92,6%	-22,1%	-70,5%

Source: Bloomberg, 2012.

Appendix 4

IPOs in the US (2000–2005): Long-term (3Y) Performance vs. S&P 500 Index (3Y) Performance

Currency: USD

Short Name	Ticker	IPO date	First day Closing	Index IPO date	IPO date +1Y	IPO share price +1Y	IPO date +2Y	IPO price +2Y	IPO date +3Y	IPO share price +3Y	Index IPO date +3Y	IPO 1Y change	IPO 2Y change	IPO 3Y change	Index 3Y change	Differ-ence
2005																
HUNTSMAN CORP	HUN US Equity	2005-02-10	24,5	1197,01	2006-02-10	20,7	2007-02-12	20,8	2008-02-11	23,52	1339,13	-15,5%	-15,3%	-4.0%	11,9%	-15,9%
LAZARD LTD- CL. A	LAZ US Equity	2005-05-04	25	1175,65	2006-05-04	38,68	2007-05-04	55,2	2008-05-05	36,06	1407,49	54,7%	120,896%	44,2%	19,7%	24,5%
CELANESE CORP-A	CE US Equity	2005-01-20	16	1175,41	2006-01-20	19,02	2007-01-22	25,5	2008-01-22	33,79	1353,11	22,6%	59,4%	111,2%	15,1%	96,1%
KKR FINANCIAL HO	KFN US Equity	2005-06-23	24 217	1200,73	2006-06-23	20,99	2007-06-25	25,6	2008-06-23	11,26	1318,00	-13,3%	5,7%	-53.5%	9,8%	-63,3
WRIGHT EXPRESS	WXS US Equity	2005-02-15	17,5	1210,12	2006-02-15	23,8	2007-02-15	28,8	2008-02-15	29,24	1349,99	36,00%	64,6%	67,1%	11,6%	55,5%
2004																
GENWORTH FINANCI	GNW US Equity	2004-05-24	18,75	1095,41	2005-05-24	27,99	2006-05-24	33,4	2007-05-24	35,92	1507,51	49,3%	78,1%	91,6%	37,6%	54%
ASSURANT INC	AIZ US Equity	2004-02-04	23,75	1126,52	2005-02-04	33,58	2006-02-04	44,6	2007-02-05	57,11	1446,99	41,4%	87,6%	140,5%	28,5%	112%
GOOGLE INC- CL A	GOOG US Equity	2004-08-18	100,01	1398,56	2005-08-18	279,99	2006-08-18	383,00	2007-08-20	497,90	1445,55	180%	283,3%	397,9%	32,0%	365,9%
APOLLO INV CORP	AINV US Equity	2004-04-05	15,41	1150,57	2005-04-05	17,49	2006-04-05	18,50	2007-04-05	22,25	1439,37	13,5%	20,1	44,4%	25,10%	19,3%
ASSURED GUARANTY	AGO US Equity	2004-04-22	18,22,	1139,93	2005-04-22	18,68	2006-04-24	25,00	2007-04-23	27,42	1480,93	2,5%	37,2	50,5%	29,9%	20%
2003																
MPG OFFICE TRUST	MPG US Equity	2003-06-24	19	983,45	2004-06-24	24,71	2005-06-24	27,80	2006-06-26	35,28	1250,56	30,1%	46,1%	85,7%	27,2%	58,5%
PROVIDENT FINANC	PFS US Equity	2003-01-15	15,25	918,22	2004-01-15	18,81	2005-01-18	18,10	2006-01-17	18,71	1283,72	23,3%	18,6	22,7%	39,8%	-17,1%
AXIS CAPITAL	AXS US Equity	2003-06-30	25,5	974,5	2004-06-30	28,00	2005-06-30	28,30	2006-06-30	28,61	1270,20	9,8%	11%	12,2%	30,3%	-18,2%
FIRST TST VL DVD	FVD US Equity	2003-08-27	11,4754	996,79	2004-08-26	11,0254	2005-08-26	12,10	2006-08-28	15,18	1301,78	-3,9%	5,6%	32,3%	30,6%	1,7%
CAPITALSOUR CE IN	CSE US Equity	2003-08-06	15	967,08	2004-08-06	19 298	2005-08-06	17,00	2006-08-07	23,01	1275,77	20,2%	11,9%	51,2%	31,9%	19,3%
2002																
SEAGATE TECHNOLO	STX US Equity	2002-12-10	10,94	904,45	2003-12-10	17 134	2004-12-10	16,30	2005-12-12	19,34	1260,43	56,7%	49,1%	76,8%	39,4%	37,5%
PLATINUM UNDERWR	PTP US Equity	2002-10-28	25,5	890,23	2003-12-05	55 373	2004-12-05	114,00	2005-12-05	185,1	1262,09	121,5%	356,5%	640,3%	41,8%	598,5%
WYNN RESORTS LTD	"WYNN US Equity"	2002-10-25	9 713	897,65	2003-10-27	15 432	2004-10-25	40,30	2005-10-25	36,35	1196,54	58,9%	315.1%	274,2%	33,3%	240,9%
LIN TV CORP- CL A	TVL US Equity	2002-05-02	23	1084,56	10/282003	28,05	2004-10-28	29,50	2005-10-28	27,86	1198,41	22,00%	28%	21,1%	10,5%	10,6%
ENBRIDGE ENERGY	EEQ US Equity	2002-10-10	8 843	803,92	2003-10-10	11 651	2004-10-11	12,40	2005-10-10	15,78	1230,96	31,7%	39,9%	78,5%	53,1%	25,4%

Short Name	Ticker	IPO date	First day Closing	Index IPO date	IPO date +1Y	IPO share price +1Y	IPO date +2Y	IPO price +2Y	IPO date +3Y	IPO share price +3Y	Index IPO date +3Y	IPO 1Y change	IPO 2Y change	IPO 3Y change	Index 3Y change	Differ-ence
2001																
KRAFT FOODS INC	KFT US Equity	2001-06-12	31,50	1255,85	2002-06-12	43,80	2003-06-12	33,70	2004-06-14	30,72	1125,29	39,1%	7,1%	-2,5%	-10.4%	7,9%
PRUDENTL FINL	PRU US Equity	2001-12-12	29,1	1137,07	2002-12-12	31,42	2003-12-12	41,20	2004-12-13	52,13	1198,68	8%	41,6%	7,91%	5,4%	73,7%
PRINCIPAL FINL	PFG US Equity	2001-10-22	20,50	1089,91	2002-10-22	28,48	2003-10-22	31,7	2004-10-22	35,51	1095,74	38,9%	54,4%	73,2%	0,5%	72,7%
WELLPOINT INC	WLP US Equity	2001-10-29	20,25	1078,3	2002-10-29	32,79	2003-10-29	34,6	2004-10-29	40,2	1130,20	61,9%	71,0%	98,5%	4,8%	93,7%
ACCENTURE PLC-A	ACN US Equity	2001-07-18	15,10	1207,71	2002-07-18	13,9	2003-07-18	20,7	2004-07-19	25,63	1100,90	-8,0%	36 ,8%	69,7%	-8,8%	78,6%
2000																
METLIFE INC	MET US Equity	2000-04-04	14,50	1494,73	2001-04-04	29,16	2002-04-04	31,50	2003-04-04	27,96	878,85	101,1%	117,5%	92,8%	-41,2%	134,0%
GENERAL DYNAMICS	GD US Equity	2000-09-25	25,50	1439,03	2001-09-25	42,91	2002-09-25	41,00	2003-09-25	38,04	1003,27	68,3%	60,9%	49,2%	-30,3%	79,5%
ENTRAVISION CO-A	EVC US Equity	2000-08-01	17,9177	1438,1	2001-08-01	12,0253	2002-08-01	9,43	2003-08-01	10,05	980,15	-32,9%	-47,4%	-43,9%	-31,8%	-12,1%
MONSANTO CO	MON US Equity	2000-10-18	11	1342,13	2001-10-18	18,17	2002-10-18	8,17	2003-10-20	12,00	1044,68	65,2%	-25,7%	9,1%	-22,2%	31,3%
PACKAGING CORP	PKG US Equity	2000-01-27	12,00	1398,56	2001-01-29	13,8	2002-01-28	17,6	2003-01-27	16,99	847,48	15,0%	46,7%	41,6%	-39,4%	81,0%

Source: Bloomberg, 2012.