

IAS 20	Accounting for Government Grants and Disclosure of Government Assistance	No major differences
IAS 21	Accounting for the Effects of Changes in Foreign Exchange Rates	In Jordan, before introducing IAS 21, there were no accounting treatments or legal requirements related to the effects of changes in foreign exchange rates.
IAS 22	Accounting for Business Combinations	No major differences
IAS 23	Capitalisation of Borrowing Costs	No major differences
IAS 24	Related Party Disclosures	In Jordan, before introducing IAS 24, there were no legal requirements for related party disclosures.
IAS 25	Accounting for Investments	No major differences
IAS 26	Accounting and Reporting by Retirement Benefit Plans	In Jordan, before introducing IAS 26, there were no legal requirements for accounting and reporting by retirement benefit plans. However, IAS 26 is not applicable to the present situation of Jordan since it is not the practice of employers to cater for their employees after leaving their employment.
IAS 27	Consolidated Financial Statements and Accounting for Investments in Subsidiaries	No major differences
IAS 28	Accounting for Investments in Associates	No major differences
IAS 29	Financial Reporting in Hyperinflationary Economies	In Jordan, before introducing IAS 29, there were no legal requirements related to financial reporting in hyperinflationary economies.

Note: IAS 30 and IAS 31 are not included because their effective dates are after 1 January 1991 and January 1992 respectively [after the study period of this research (1989, 1990)].

IAS 14	Reporting Financial Information by Segment	In Jordan, it is mandated and legally required for banks and insurance companies to prepare and present segment financial information. Reporting of financial information by segment is not legally required, however, for the industrial and service companies. IAS 14, on the other hand, required for all economic sectors to prepare and present segment financial information.
IAS 15	Information Reflecting the Effects of Changing Prices	IAS 15 provides detailed explanation and requirements about accounting treatment for changing prices, it also provides detailed disclosure guidelines. In Jordan, before introducing IAS 15, there were no such detailed accounting treatments or legal requirements for changing prices.
IAS 16	Accounting for Property, Plant and Equipment	IAS 16 allows measurement of property, plant and equipment with values higher than the historical cost. In Jordan, companies used to present the value of property, plant and equipments according to the historical cost without paying any attention to the changes in its value.
IAS 17	Accounting for Leases	IAS 17 provides detailed explanation about accounting treatment for leases, also it provides detailed disclosure guidelines. In Jordan, before introducing IAS 17, there were no any accounting treatments or legal requirements for leases at all, and its left for accountants personal opinion and judgements.
IAS 18	Revenue Recognition	No major differences
IAS 19	Accounting for Retirement Benefits in the Financial Statements of Employers	In Jordan, before introducing IAS 19, there were no accounting treatments or legal requirements related to retirements benefits in the financial statements of employers. However, IAS 19 is not applicable to the present situation of Jordan since it is not the practice of employers to cater for their employees after leaving their employment.

IAS 7	Statement of Changes in Financial Position	Before introducing IAS 7, there were no legal requirements for the preparation and presentation of the statements of changes in financial position in Jordan.
IAS 8	Unusual and Prior Period Items and Changes in Accounting Policies	Before introducing IAS 8, there were no legal requirements for providing information regarding the changes in accounting policies in Jordan.
IAS 9	Accounting for Research and Development Activities	IAS 9 provides detailed explanation and requirements about accounting treatment for research and development activities, also it provides detailed disclosure guidelines. In Jordan, no such very detailed explanation and requirements about accounting treatment for research and development activities were disclosed.
IAS 10	Contingencies and Events Occurring After the Balance Sheet Date	Before introducing IAS 10, there were no legal requirements or any accounting treatments for contingencies and events occurring after the balance sheet date in Jordan.
IAS 11	Accounting for Construction Contracts	No major differences
IAS 12	Accounting for Taxes on Income	IAS 12 provides detailed accounting treatment for taxes on income. In Jordan, Jordanian legislative requirements for taxation are vague and subjective. Jordanian firms used to provide provisions for taxation without mentioning the method used for the determination of this provision.
IAS 13	Presentation of Current Assets and Current Liabilities	In Jordan accounting treatment and requirements related to presentation of current assets and current liabilities in the balance sheet statement is fairly similar to IAS 13 requirements. However, IAS 13 adds more new items to be disclosed and it contains more detail descriptions of the differences between current and non-current items.

## APPENDIX A

**Table 1: Major difference between International Accounting Standards (IAS) and Jordanian accounting practices**

<b>IAS 1</b>	Disclosure of accounting policies	Jordanian Companies Act did not provide detailed disclosure guidelines. IAS 1, on the other hand, provides detailed disclosure guidelines, e.g., it contains reserve accounting disclosures not included in article 168 of Jordanian Companies Act No. 1 1989.
<b>IAS 2</b>	Valuation and Presentation of Inventories in the Context of the Historical Cost System	In Jordan, the law contains no provisions regarding the valuation of inventories. However current practice in Jordan for inventories to be valued at historical cost or market which ever is lower. IAS 2 provides detailed accounting treatments and disclosure guidelines. IAS 2 uses net realizable value as the market price valuation of inventories.
<b>IAS 3</b>	Consolidated Financial Statements	No major differences
<b>IAS 4</b>	Depreciation Accounting	IAS 4 provides provisions relating to tangible and intangible assets, also it provides detailed disclosure guidelines. In Jordan, neither Companies Law nor the Income Tax Law have provisions relating to depreciation of intangibles. There is no detailed disclosure guidelines.
<b>IAS 5</b>	Information to be Disclosed in Financial Statements	IAS 5 requires specific disclosures in the income statement and balance sheet and supplementary information concerning the basis for preparing these reports. In Jordan, only broad disclosures used and no supplementary information has been provided.
<b>IAS 6</b>	Accounting treatment of changing prices	Before the introduction of IAS 6, changes in prices were not accounted for in Jordan.

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Table 9  
Cumulative Abnormal Returns (CARs) t-test results, Trading Pattern

Table 9: Cumulative Abnormal Returns (CARs) t-test results, Trading Patterns

Sample	Interval	Experimental Groups				Control Groups			
		N	CAR	CSD	t-test	N	CAR	CSD	t-test
<b>Panel A (Low Traded Firms)</b>									
1990	-30-0	10	-0.08847	0.03921	-2.256 *	10	0.05504	0.04050	1.359
	0-10		-0.13075	0.03541	-3.692 **		0.01838	0.03646	0.504
	-60-20		-0.13616	0.01770	-7.692 **		0.01012	0.01784	0.567
			-0.14418	0.02395	-6.020 **		-0.01073	0.02212	-0.485
			-0.14418	0.05753	-2.506 *		-0.01073	0.05829	-0.184
1991	-30-0	10	0.14610	0.03452	4.232 **	10	0.08053	0.03688	2.183 *
	0-10		0.22326	0.03996	5.587 **		0.13335	0.04282	3.113 **
	-60-20		0.22744	0.01936	11.74 **		0.13148	0.02149	6.118 **
			0.23969	0.02693	8.900 **		0.13658	0.02597	5.259 **
			0.23969	0.05811	4.124 **		0.13658	0.06146	2.222 *
<b>Panel B (Heavily Traded Firms)</b>									
1990	-30-0	21	-0.04264	0.02975	-1.433	7	-0.01450	0.03789	-0.382
	0-10		-0.06240	0.03168	-1.969 *		-0.00697	0.04134	-0.168
	-60-20		-0.06668	0.01548	-4.307 **		-0.01398	0.01880	-0.743
			-0.07065	0.01991	-3.548 **		-0.02094	0.02512	-0.833
			-0.07065	0.04723	-1.495		-0.02094	0.06091	-0.343
1991	-30-0	21	0.03651	0.02869	1.272	7	0.07560	0.03933	1.922
	0-10		0.11216	0.03116	3.599 **		0.05459	0.04011	1.361
	-60-20		0.10593	0.01374	7.709 **		0.02265	0.02264	1.000
			0.10603	0.01678	6.318 **		0.01565	0.02684	0.583
			0.10603	0.04479	2.367 *		0.01565	0.06108	0.256

\* Significant at the 5 percent level \*\* Significant at the 1 percent level  
CAR = Cumulative Average Abnormal Returns CSD = Cumulative Standard Deviation N = The sample size

Cumulative Abnormal Returns (CARs) t-test results, Company Performance

Table 10: Cumulative Abnormal Returns (CARs) t-test results, Company Performance

Sample	Interval	Experimental Groups				Control Groups			
		N	CAR	CSD	t-test	N	CAR	CSD	t-test
<b>Panel A (Winner Firms)</b>									
1990	-30-0	24	-0.15105	0.02361	-6.397 **	15	-0.00719	0.02856	-0.251
	0-10		-0.16071	0.01249	-12.86 **		-0.01335	0.01430	-0.933
	-60-20		-0.16795	0.03689	-4.552 **		-0.02692	0.04352	-0.618
1991	-30-0	24	0.04856	0.02557	1.899 *	15	0.05784	0.03040	1.902 *
	0-10		0.05032	0.01166	4.315 **		0.04887	0.01534	3.185 **
	-60-20		0.05378	0.36392	0.147		0.04552	0.04351	1.046
<b>Panel B (Loser Firms)</b>									
1990	-30-0	7	0.03935	0.07259	0.542	2	0.12134	0.11652	1.041
	0-10		0.02071	0.03253	0.636		0.10188	0.02636	3.864
	-60-20		0.01539	0.10905	0.141		0.07493	0.19494	0.384
1991	-30-0	7	0.46433	0.06858	6.770 **	2	0.42402	0.14760	2.872
	0-10		0.46625	0.02907	16.03 **		0.37010	0.09611	3.850
	-60-20		0.47996	0.10420	4.606 **		0.39615	0.23132	1.712

\* Significant at the 5 percent level \*\* Significant at the 1 percent level  
CAR = Cumulative Average Abnormal Returns CSD = Cumulative Standard Deviation N = The sample size

Table 7  
Cumulative Abnormal Returns (CARs) t-test results. Firm Size

Table 7: Cumulative Abnormal Returns (CARs) t-test results, Firm Size

Sample	Interval	Experimental Groups				Control Groups			
		N	CAR	CSD	t-test	N	CAR	CSD	t-test
<b>Panel A (Small Size Firms)</b>									
1990	-30-0	27	-0.09942	0.02698	-3.684 **	10	-0.00675	0.03753	-0.179
	0-10		-0.10333	0.01294	-7.985 **		-0.00267	0.01711	-0.156
	-60-20		-0.11109	0.04069	-2.730 **		-0.01983	0.06025	-0.329
1991	-30-0	27	0.17297	0.02734	6.326 **	10	0.16918	0.04250	3.980 **
	0-10		0.17688	0.01192	14.83 **		0.15544	0.02341	6.639 **
	-60-20		0.18125	0.03933	4.608 **		0.16423	0.06174	2.660 *
<b>Panel B (Large Size Firms)</b>									
1990	-30-0	5	-0.06348	0.03168	-2.003	6	0.02893	0.04383	0.660
	0-10		-0.08413	0.02914	-2.887 *		0.00430	0.02259	0.190
	-60-20		-0.07002	0.06492	-1.078		-0.00793	0.06454	-0.122
1991	-30-0	5	0.02190	0.04526	0.483	6	0.00340	0.04468	0.076
	0-10		0.01673	0.02410	0.694		-0.01158	0.02175	-0.532
	-60-20		0.01981	0.06627	0.298		-0.02383	0.06738	-0.353

\* Significant at the 5 percent level \*\* Significant at the 1 percent level

CAR = Cumulative Average Abnormal Returns CSD = Cumulative Standard Deviation N = The sample size

Table 8  
Cumulative Abnormal Returns (CARs) t-test results. Firm Ownership

Table 8: Cumulative Abnormal Returns (CARs) t-test results, Firm Ownership

Sample	Interval	Experimental Groups				Control Groups			
		N	CAR	CSD	t-test	N	CAR	CSD	t-test
<b>Panel A (Domestic Ownership Firms)</b>									
1990	-30-0	21	-0.03807	0.03081	-1.235	11	0.02141	0.03614	0.592
	0-10		-0.04089	0.01387	-2.948 **		0.02068	0.01587	1.303
	-60-20		-0.04713	0.04526	-1.041		-0.00512	0.05616	-0.091
1991	-30-0	21	0.18009	0.03050	5.904 **	11	0.19844	0.03874	5.122 **
	0-10		0.19489	0.01447	13.46 **		0.19809	0.02134	9.282 **
	-60-20		0.20142	0.04500	4.476 **		0.20015	0.05827	3.434 **
<b>Panel B (Foreign Ownership Firms)</b>									
1990	-30-0	10	-0.21388	0.03854	-5.549 **	6	-0.01676	0.03979	-0.421
	0-10		-0.22676	0.02258	-10.04 **		-0.03736	0.02460	-1.518
	-60-20		-0.22898	0.06358	-3.601 **		-0.03292	0.06457	-0.509
1991	-30-0	10	0.09759	0.04315	2.261 *	6	-0.07787	0.04763	-1.634
	0-10		0.07499	0.01477	5.077 **		-0.11760	0.01987	-5.918 **
	-60-20		0.07432	0.05777	1.286		-0.12104	0.06448	-1.877

\* Significant at the 5 percent level \*\* Significant at the 1 percent level

CAR = Cumulative Average Abnormal Returns CSD = Cumulative Standard Deviation N = The sample size

Table 5  
Cumulative Abnormal Returns (CARs) t-test results. All Firms

Table 5: Cumulative Abnormal Returns (CARs) t-test results, All Firms

Sample	Interval	Experimental Groups				Control Groups			
		N	CAR	CSD	t-test	N	CAR	CSD	t-test
<b>Panel A (Market Model)</b>									
1990	-30-0	31	-0.10509	0.02417	-4.347 **	17	0.00794	0.02661	0.298
	0-10		-0.11692	0.01185	-9.866 **		0.00020	0.01297	0.015
	-60-20		-0.12369	0.03698	-3.344 **		-0.01493	0.04159	-0.358
1991	-30-0	31	0.14892	0.02470	6.029 **	17	0.10092	0.02912	3.465 **
	0-10		0.15072	0.01094	13.77 **		0.08667	0.01545	5.609 **
	-60-20		0.15665	0.03580	4.375 **		0.08679	0.04274	2.030 *
<b>Panel B (Average Return Model)</b>									
1990	-30-0	31	0.02459	0.02417	1.017	17	0.05787	0.02649	2.184 *
	0-10		0.01157	0.01137	1.017		0.05473	0.01297	4.219 **
	-60-20		0.01699	0.03693	0.460		0.04360	0.04200	1.038
1991	-30-0	31	0.24614	0.02398	10.26 **	17	0.13206	0.02966	4.452 **
	0-10		0.24782	0.01086	22.81 **		0.11715	0.01586	7.386 **
	-60-20		0.25475	0.03467	7.347 **		0.11394	0.04348	2.620 **

\* Significant at the 5 percent level \*\* Significant at the 1 percent level  
CAR = Cumulative Average Abnormal Returns CSD = Cumulative Standard Deviation N = The sample size

Table 6  
Cumulative Abnormal Returns (CARs) t-test results. Economic Sector

Table 6: Cumulative Abnormal Returns (CARs) t-test results, Economic Sectors

Sample	Interval	Experimental Groups				Control Groups			
		N	CAR	CSD	t-test	N	CAR	CSD	t-test
<b>Panel A (Financial Sector)</b>									
1990	-30-0	6	-0.06158	0.04074	-1.511	3	0.02941	0.07711	0.381
	0-10		-0.11428	0.02946	-3.879 **		0.00568	0.04577	0.124
	-60-20		-0.07851	0.06866	-1.114		0.01519	0.12527	0.121
1991	-30-0	6	0.16553	0.05049	3.278 *	3	0.06139	0.07560	0.812
	0-10		0.16960	0.02434	6.967 **		0.05318	0.04455	1.193
	-60-20		0.19394	0.07546	2.570 *		0.03917	0.11717	0.334
<b>Panel B (Services Sector)</b>									
1990	-30-0	4	0.15921	0.11160	1.426	5	0.07472	0.05851	1.277
	0-10		0.19412	0.04659	4.166 *		0.07432	0.02867	2.592 *
	-60-20		0.18580	0.16586	1.120		0.03867	0.09491	0.407
1991	-30-0	4	0.20840	0.09721	2.143	5	0.23364	0.06842	3.414 *
	0-10		0.23199	0.03677	6.309 **		0.24792	0.03135	7.908 **
	-60-20		0.22928	0.13407	1.710		0.26779	0.09959	2.688 *
<b>Panel C (Industrial Sector)</b>									
1990	-30-0	19	-0.17448	0.03009	-5.798 **	9	-0.03631	0.03373	-1.076
	0-10		-0.18324	0.01455	-12.59 **		-0.04280	0.01368	-3.128 **
	-60-20		-0.20312	0.04620	-4.396 **		-0.05476	0.05015	-1.091
1991	-30-0	19	0.13115	0.03223	4.069 **	9	0.04036	0.03790	1.064
	0-10		0.12765	0.01440	8.864 **		0.00824	0.02119	0.388
	-60-20		0.12958	0.04676	-2.771 **		0.00210	0.05459	0.038

\* Significant at the 5 percent level \*\* Significant at the 1 percent level  
CAR = Cumulative Average Abnormal Returns CSD = Cumulative Standard Deviation N = The sample size

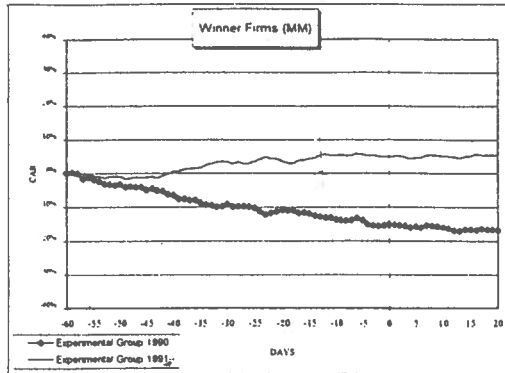


Figure 8

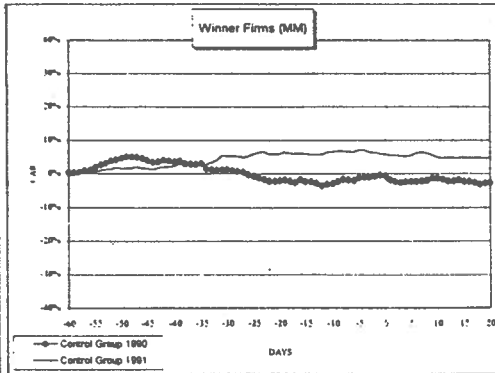
Cumulative Abnormal Returns (CARs) Around Earnings Announcements  
Firm Performance

Panel A (Winner Firms)

Experimental Groups

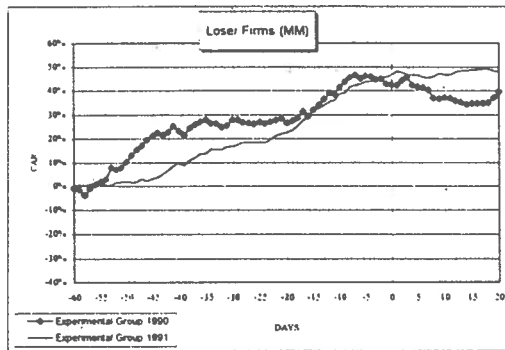


Control Groups



Panel B (Loser Firms)

Experimental Groups



Control Groups

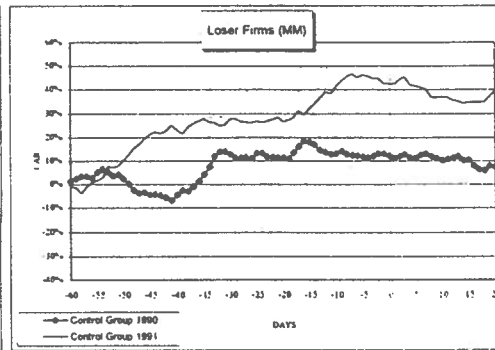
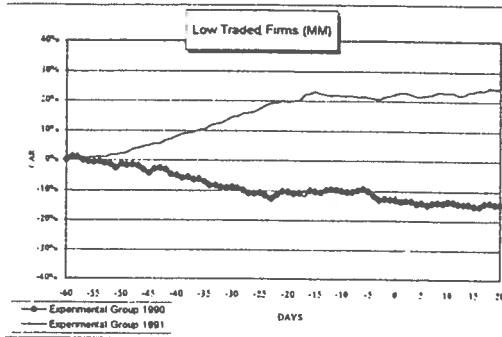


Figure 7

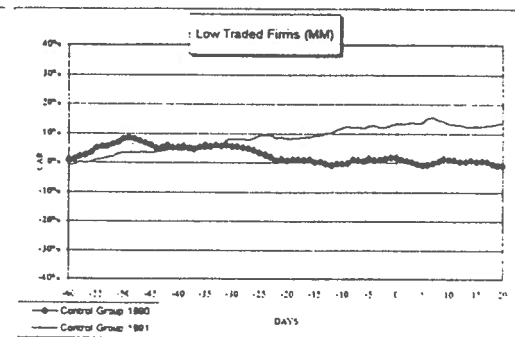
Cumulative Abnormal Returns (CARs) Around Earnings Announcements  
Trading Pattern

Panel A ( Low Traded Firms)

Experimental Groups

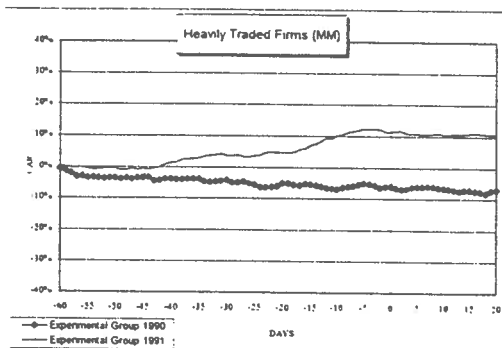


Control Groups



Panel B ( Heavily Traded Firms)

Experimental Groups



Control Groups

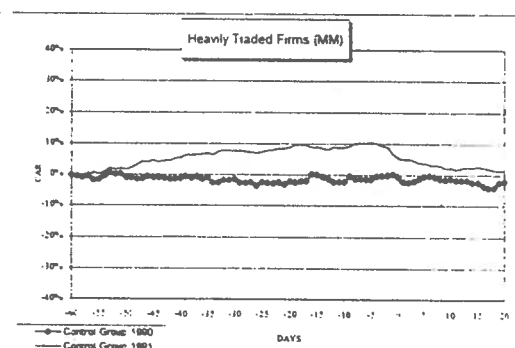
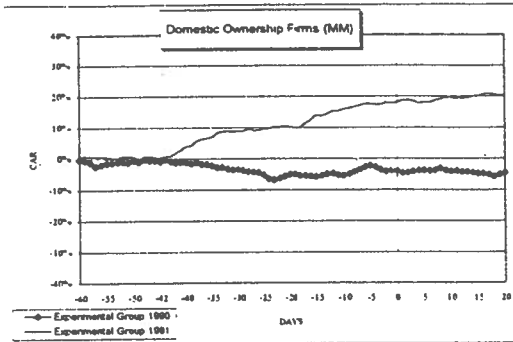


Figure 6

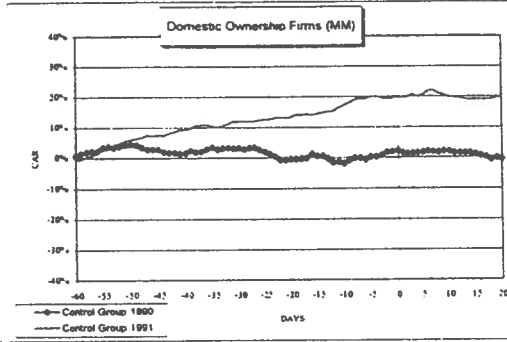
Cumulative Abnormal Returns (CARs) Around Earnings Announcements  
Firm Ownership

Panel A (Domestic Ownership)

Experimental Groups

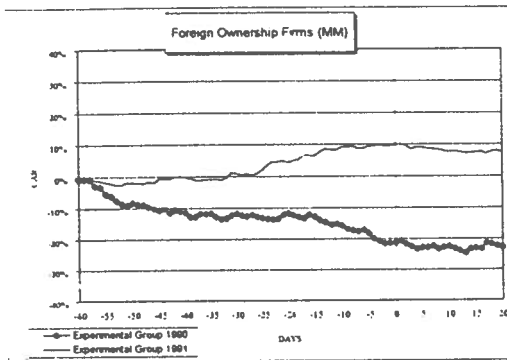


Control Groups

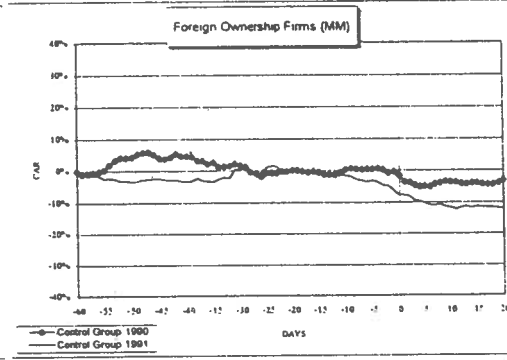


Panel B (Foreign Ownership)

Experimental Groups



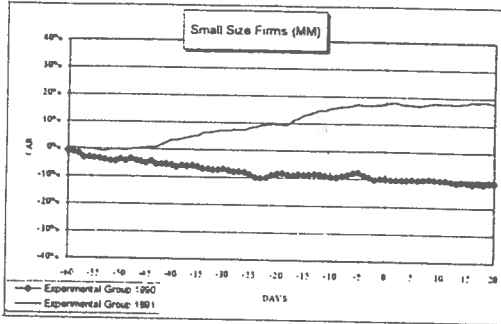
Control Groups



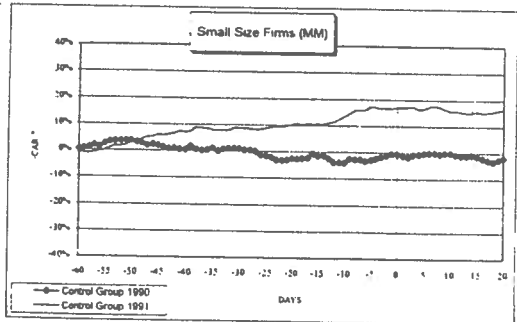
**Figure 5**  
**Cumulative Abnormal Returns (CARs) Around Earnings Announcements**  
**Firm Size**

**Panel A (Small Firms)**

**Experimental Groups**

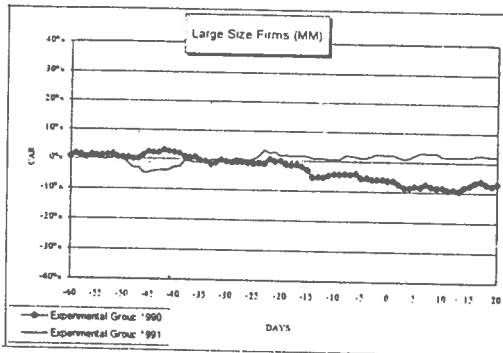


**Control Groups**



**Panel B (Large Firms)**

**Experimental Groups**



**Control Groups**

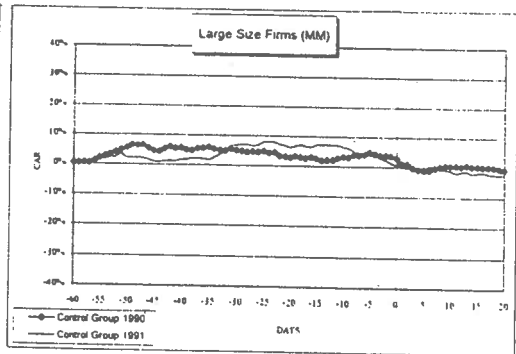
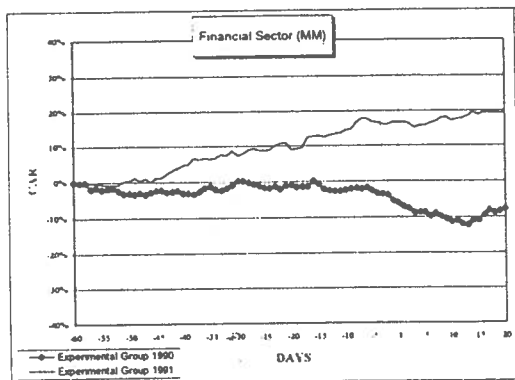


Figure 4

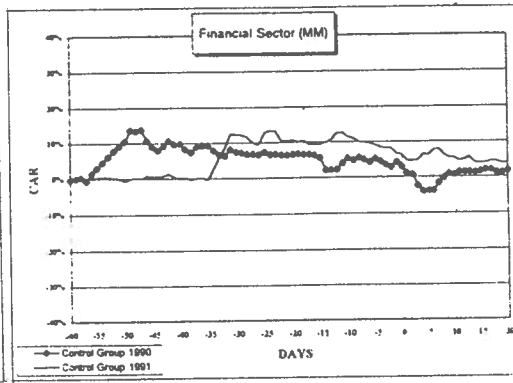
Cumulative Abnormal Returns (CARs) Around Earnings Announcements  
Economic Sector

Panel A (Financial Sector)

Experimental Groups

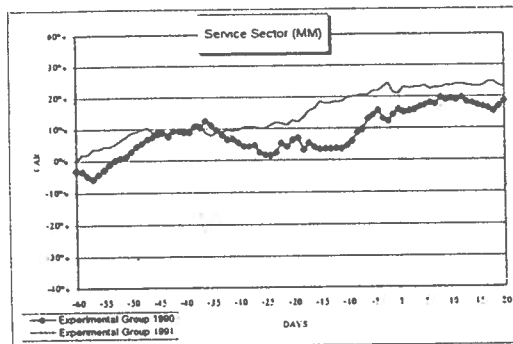


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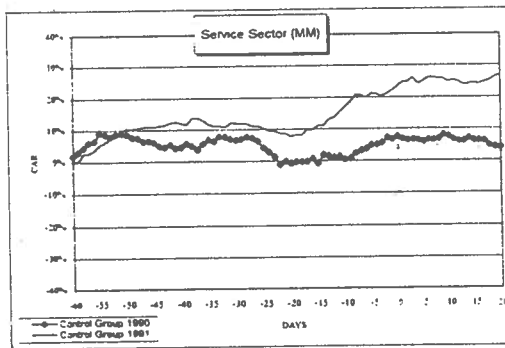


Panel B (Service Sector)

Experimental Groups

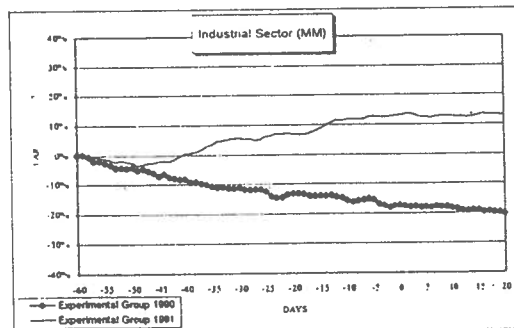


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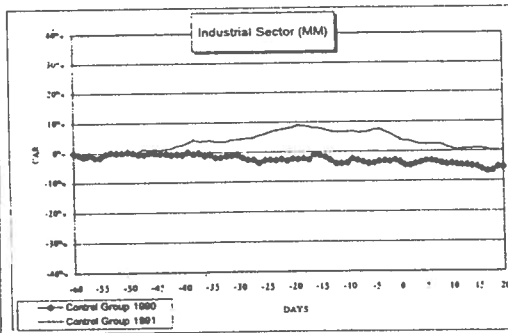


Panel C (Industrial Sector)

Experimental Groups



Control Groups



## General Findings

The general findings of this study are as follows:

1. There are large differences between traditional Jordanian accounting practices and those of the IASs. IASs require more information disclosure and are, in general, closer to the idea of “a true and fair view” than Jordanian accounting practices.
2. In general, firms reporting under IASs rules recorded higher abnormal returns prior to accounts publication than non-IAS reporting firms. In previous studies such an effect has been interpreted as suggesting that IASs have information content beyond that of traditional domestic accounts.
3. The size of abnormal return prior to announcements was larger for IAS adopters in financial and industrial sectors than for service sector.
4. Volume of trading did not influence general results.
5. The smallest reaction from a change to IASs was noted for the “large firms” sample.  
  
This is possibly due to extensive reporting by large firms even before IASs were introduced.
6. For small firms which adopted IASs, the abnormal returns prior to accounts release were higher than for firms which did not adopt.
7. A very clear result was recorded for domestic owned and foreign owned firms. The abnormal returns prior to announcement for foreign-owned (IASs adopters) firms were large. For domestic-owned (IASs adopters) firms the abnormal returns were negligible. This result runs contrary to claims that IASs adoption is equally beneficial to domestic and foreign owned firms.
8. In general, IASs adopting firms recorded negligible abnormal returns after accounts publication.
9. A similar effect was noted for non-adopters, although some subsamples (industrial sector and foreign-owned firms) recorded negative abnormal returns after accounts release.

## Conclusions

The findings of this research give support to the notion that IAS-based earnings figures contain incremental information to the Jordanian stock market. Most of the information is, however, anticipated or leaked to the

The CARs curves for foreign ownership firms are presented in figure 6 panel B. As can be seen from the figure that, following the earnings announcements the experimental group of 1990 recorded a continuous negative CARs trend, whilst the experimental group of 1991 recorded a continuous positive CARs trend. The control of 1990 recorded no reaction, whilst control groups of 1991 recorded slightly negative CARs after earnings announcements.

Panel B in Table 8 shows that the experimental group of 1990 recorded significant negative CARs at 1 percent level over all intervals, whilst experimental group of 1991 recorded significant positive CARs at 5 percent level over -30 to 0 interval and a significant positive CARs at 1 percent level over 0 to 10 interval. The control groups of 1990 recorded no reaction, also control groups of 1991 (except interval 0 to 10 which recorded significant negative CARs at 1 percent level). Therefore, we can reject  $H_{08}$ , that for foreign ownership firms earnings releases based on IAS in period 1991 do not have price reactions which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period 1990. This result indicates that experimental group of 1991 has higher information content than experimental group of 1990, which suggests that IAS-based earnings figures releases do possess information content beyond information content of earnings releases based on the former Jordanian accounting rules.

## 7. SUMMARY AND CONCLUSIONS

This study is one of the first empirical studies on the information content of IAS figures. The primary aim for conducting this study was to investigate the effects of introducing IASs on the Jordanian Stock Exchange. More specifically, the research examined whether IAS-based earnings figures contain incremental information over earnings based on traditional Jordanian accounting practices. The result make a contribution to the discussion on the usefulness of IAS-based figures in developing countries.

The methodology employed in this study is similar to that of previous information content studies (event study methodology). The study differs from previous studies, however, in two important respects. Firstly, previous studies have been based on the market model. Such a procedure is sometimes criticized as being inappropriate, particularly for developing countries where markets are not necessarily efficient. Hence this study employed two further models using average returns and raw returns. The second difference between this study and previous research is that most previous studies examine the influence of IASs on the share prices of a single portfolio of firms. This study employed the use of subsamples (financial sector, service sector, industrial sector, low traded firms, heavily traded firms, small firms, large firms, domestic owned firms, foreign owned firms, winner firms and loser firms) enabling a much more sensitive interpretation of results.

As can be seen from Panel B in figure 4 (service sector) the CARs curves for experimental and control groups of 1990 and 1991 track each other and both recorded a continuous positive trend. Also, the CARs t-test results in Table 6 Panel B reveal significant positive CARs for both experimental and control groups of 1990 and 1991. Therefore, we accept  $H_{03}$ , that for the service sector earnings releases based on IAS in period 1991 do not have price reactions which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period 1990.

### **Firm Size**

The CARs curves for small and large firms are presented in Figure 5 panels A and B respectively. As can be seen from Panel A (small firms) that the experimental group of 1990 recorded negative CARs over the test period, whilst the experimental group of 1991 reported positive CARs. The control groups recorded almost the same results. Panel A in Table 7 confirmed these results. Therefore, we accept  $H_{05}$ , that for small size firms earnings releases based on IAS in period 1991 do not have price reactions which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period 1990.

Panel B (large firms) shows that no reaction has been recorded for both the experimental and control groups. Panel B in Table 7 confirmed this result. Therefore, we accept  $H_{06}$ , that for large size firms earnings releases based on IAS in period 1991 do not have price reaction which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period 1990. A possible interpretation of this “no effect” finding is that large firms are used to provide investors with much information so that accounts production, whether according to IAS or not provide investors with nothing “new”.

### **Firm Ownership**

The CARs curves for domestic ownership firms are presented in figure 6 panel A. As can be seen from the figure, the experimental group of 1990 recorded slightly negative CARs trend around earnings announcements, whilst the experimental group of 1991 recorded positive CARs trend. However, the control groups recorded the same results as the experimental groups. Panel A in Table 8 (CAR t-test) confirmed this result.

Therefore, we accept  $H_{07}$ , that for domestic ownership firms earnings releases based on IAS in period 1991 do not have price reactions which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period 1990.



experimental group of 1991 recorded positive CARs over the test period, whilst experimental group of 1990 recorded negative CARs. Using the ARM (as seen in panel B) the experimental group of 1991 recorded highly positive CARs whilst the experimental group of 1990 recorded almost zero CARs. To test  $H_{01}$  more formally, a t-test is used, in which the cross sectional variance across time is used to test the significance of the drift in the CARs over various intervals (Equation 5, 6 and 7). Table 5 represents the CARs t-test results for study sample (experimental and control groups) over various subintervals for the MM and ARM in panels A and B respectively.

Panel A in Table 5 shows that MM over intervals recorded significant negative CARs at 1 percent level for experimental group of 1990, whilst the experimental group of 1991 recorded significant positive CARs at 1 percent level. Panel B shows that ARM recorded significant positive CARs at 1 percent level for the experimental group of 1991, but for 1990 no reaction is noticeable. Therefore, we can reject  $H_{01}$ . These results might indicate that experimental group of 1991 has higher information content than experimental group of 1990, which suggests that IAS-based earnings figure releases to possess information content beyond information content of earnings releases based on the former Jordanian accounting rules.

### **Economic Sectors**

The CARs curves for financial sector, service sector and industrial sector (from using the MM) are presented in figure 4 panels A, B and C respectively. From figure 4 panel A (financial sector) it can be seen that, following the earnings announcements the experimental group of 1991 recorded a continuous positive increasing CARs trend, but experimental group of 1990 recorded a continuous negative CARs trend. At the same time so such clear reaction was observed under control groups.

Panel A in Table 6 reveals that, the experimental group of 1990 recorded significant negative CARs at 1 percent levels over 0 to 10 interval, whilst the experimental group of 1991 recorded significant positive CARs at 5 percent level over the intervals -30 to 0 and -60 to 20. Interval 0 to 10 recorded significant positive CARs at 1 percent level. At the same time no reaction was recorded under control groups. Accordingly, we reject  $H_{02}$ , that for the financial sector earnings releases bases on IAS in period 1991 do not have price reactions which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period 1990. These results are supportive of the view that the experimental group of 1991 have higher information content than experimental group of 1990, which, in turn, suggests that (for financial sector investors) IAS-based earnings figures do contain statistically significant incremental information over earnings based on the Jordanian accounting rules.

The t-test was of the form  $AR_t / Sd_t$ , where  $Sd_t$  is the standard deviation of the abnormal returns ( $AR_t$ ) across time from -60 to 20 (test period). The standard deviation is computed as follows:

$$SD_t (AR) = \sqrt{\frac{\sum_{i=t}^n (AR_{it} - \bar{AR}_t)^2}{n - 1}}$$

The change in the CAR is tested for significance using the methodology described in Brenner (1979) with a t-test:

$$t = \frac{CAR_{KL}}{CSD_{KL}}$$

Where:

$CAR_{KL}$  = Cumulative Average Abnormal Return from day K to L.

$CSD_{KL}$  = Cumulative Standard Deviation from day K to L.

The cumulative SD is computed as follows:

$$CSD_T (AR) = \sqrt{\frac{\sum_{T=1}^T \sum_{i=t}^N (AR_{it} - \bar{AR}_t)^2}{n - 1}}$$

The CARs t-test results for the experimental and control groups over various subintervals are presented in Tables 5 to 10.

## 6. RESULTS

### All Firms

The results are not quite as were anticipated. The expectation was for abnormal returns to be observed for the experimental group but not for the control group. Both groups actually recorded abnormal returns but the effect was much higher for IAS adopters.

To test  $H_{01}$  we focus on the (CARs) on the days surrounding the earnings announcements. A visual and statistical analysis of the (CARs) were carried out. Figure 3 panel A shows the CARs curves for the study sample for 1990 and 1991 using the MM. The CARs curves from using the ARM are presented in panel B. As can be seen from figure 3 panel A (MM results) the

## Calculation of Cumulative Abnormal Returns (CARs)

The average residuals are then cumulated over the test period (81 days) for sample firms and for each subportfolio group (control and experimental) for each year's report (1990 and 1991) to form cumulative average abnormal returns (CARs). In this respect Strong (1992) points out that:

"Almost all event studies call for returns to be cumulated over a number of periods. This may be in order to fully capture the effect of an event on share prices, or to accommodate uncertainty over exact date of the event... A further reason for computing abnormal returns over a longer interval arises in some event studies from the need to specify an expectations benchmark for the accounting disclosure."

The cumulative abnormal return (from days K to L) is defined as:

$$CAR_{KL} = \sum_{t=k}^L \overline{AR}_t$$

## Use of Further Models

Brenner (1979) examines different models and concludes:

*"If 'practical' differences are required we may, depending on what is considered 'practical', conclude that the different models do not lead to different conclusions."*

Brown and Waner (1980) show that simple models, such as the market model, perform at least as well as more complex models. Nevertheless, to confirm the results obtained with the market model (MM), other models are used in this study. They are the average return model (ARM) and the raw return model (RRM). The empirical results from using the market model are summarized in Figures 3 to 8. The results using the ARM and RRM are similar to those from using the market model.

## Market Reaction Tests (tests of significance)

Each average residual was t-tested to determine whether the return for that day was of unusual size. Justification for this aspect methodology is provided by Strong (1992) who concluded:

*"If the sample securities have no unrepresentative exposure to extra-market factors and event dates are diffusely spread out in calendar time for the sample securities, then calculating abnormal returns using the ordinary least squares market model and using standard parametric statistical tests appears to be a well-specified procedure."*

$$R_{it} = \alpha_i + \beta_i R_{mt} + e_{it}$$

where:

$R_{it}$  = the return on stock i for day t;

$R_{mt}$  = the return on the value-weighted market portfolio for day t;

$e_{it}$  = the residual return on stock i for day t;

$\alpha$  = the regression intercept;

$\beta_i$  = the beta coefficient of the regression.

Using the regression parameter estimates, a prediction is made for each of the 81 days surrounding the announcement date. The parameters  $\alpha_i$   $\beta_i$  were estimated over the period -160 to -101 days before the announcement.

### Calculations of excess of returns

Excess returns for each individual stock (from 60 trading days before to 20 days after the event day) are calculated as:

$$e_{it} = R_{it} - (\alpha_i + \beta_i R_{mt})$$

The resulting residual terms (deviations between the 81 actual daily observations and the regression estimates) impound all the factors influencing the firm during the period surrounding the according standards change independent of general market movements. This technique is not suitable for a detailed assessment of the impact of accounting standards change on individual firms because estimates for specific firms are highly uncertain. Thus this study focuses on the general effect of accounting standards change and employs an averaging process to abstract the general trend from the individual firm fluctuations.

### Calculation of Average Abnormal Returns

The excess returns for each subportfolio group (control and experimental) for each year's report (1990 and 1991) were averaged cross-sectionally to arrive at average residuals. The average residual for day t, (AR<sub>t</sub>), is defined as:

$$\overline{AR}_t = \frac{1}{N} \sum_{i=1}^N e_{it}$$

where:

$e_{it}$  = the residual from the regression for company i in day t.

N = the sample size and the number of firms for each subportfolio group.

*"the typical lengths of estimation period range from 100 to 300 days for daily studies".*

In order to examine whether or not the results differ on the basis of number of observations used in the estimation process, other estimation periods were also used (50 and 150 days before the event day) and the empirical results were similar.

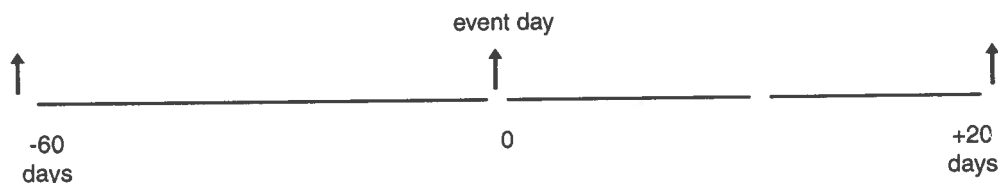
## Test Period

The period examined in detail for the purpose of this study is thus 81 days in length, consisting of the actual day of release (announcement day) of the annual reports in the newspaper ( $t=0$ ), the 20 trading days immediately following the event day and 60 trading days immediately preceding it as shown in figure 2. A period of this particular length was chosen for three reasons:

1. The available evidence on capital market semi-strong form efficiency indicates that the impact of new information with economic value is fully reflected in share prices within a few days [(for example, the rapid daily stock price reaction to dividend announcements described in Foster (1978) and Fama, Fisher, Jensen and Roll (1969)].
2. On the other hand, there is evidence that the Jordanian Stock Market is less than efficient [(Errunza and Losq (1985) and Al-homud (1987)]. There is also the possibility of extensive information leakage.
3. This choice of test period length is consistent with Peterson (1989) who states

*"the typical lengths of event window range from 21 to 121 days for daily studies".*

Figure 2: The test Period



## Calculation of Average Abnormal Returns (AARs)

### Calculation of normal (estimated) returns

The "normal" returns in this study for a period of 60 days before the annual earnings announcement day to 20 days afterwards are generated by the market model:

$H_{01}$  : For all sectors (study sample) earnings releases based on IAS in period  $t$  (1991) do not have price reactions which differ to those from firms with earnings releases based on a Jordanian accounting rules used in period  $t-1$  (1990). i.e., the average abnormal returns for the event window in period  $t$  are not significantly different from the average abnormal returns for the event windows in the period  $t-1$ .

$$H_{02} : AR_{IAS} = AR_{JAR}$$

where:

$AR_{IAS}$  = average abnormal returns based on the international accounting standards for event window to (1991).

$AR_{JAR}$  = average abnormal returns based on the Jordanian accounting rules for event windows  $t-1$  (1990).

In addition to the above major hypothesis, the following supplementary hypotheses are identified:

### Hypotheses 2 to 12

These are basically, the same (i.e. that 1990 and 1991 earnings releases based on IAS and JAR do not have different share price movement) but apply to different subsamples as follows:

- $H_{02}$  : (financial sector)
- $H_{03}$  : (service sector)
- $H_{04}$  : (industrial sector)
- $H_{05}$  : (low traded firms)
- $H_{06}$  : (heavily traded firms)
- $H_{07}$  : (small size firms)
- $H_{08}$  : (large size firms)
- $H_{09}$  : (domestic ownerships firms)
- $H_{010}$  : (foreign ownership firms)
- $H_{011}$  : (winner firms)
- $H_{012}$  : (loser firms)

## 5. RESEARCH METHODOLOGY

### Estimated period

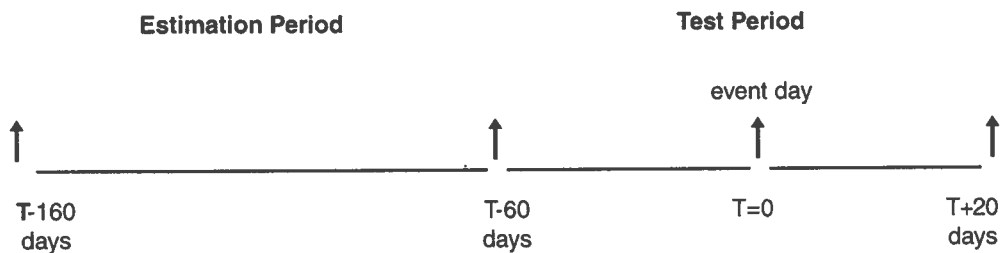
As previously mentioned the estimation period for the parameters is 100 days before the event window (see Figure 1). This is consistent with Peterson (1989) who point out that:

work had to be undertaken in order to create a suitable database. After collecting the data, several steps had to be taken before the statistical analysis was possible. The procedure was as follows:

1. The companies were each assigned a code, ranging from 000 to 103.
2. All the figures recorded on the Amman Stock Market lists in Indian numerals were translated into Arabic (English) numerals.
3. The data were checked and rechecked to eliminate any errors.
4. The data were manually put into machine-readable format for feeding into the computer. The data were again checked for fresh errors introduced by this procedure. This stage was very time consuming !.

The parameters of the market model were measured by regressing each stock's daily return on the corresponding daily returns from the market daily index using the Ordinary Least Square (OLS) estimation method. Each regression used 100 daily observation immediately preceding the test as shown in Figure 1.

*Figure 1: Parameter Estimation and Test Period*



## Research Questions

The following questions provide the basis for enquiries posed in third study:

- Q1. Do earnings figures releases based on IAS have more information content than earnings figures based on Jordan Accounting Rules (JARs)?
- Q2. Is price reaction associated with economic sectors, size of company, company ownership patterns, trading frequency, and company performance ?

## Research Hypotheses

In order to answer these questions empirically the following hypotheses are set up in relation to stock price behaviour subsequent to the release of the annual financial reports. The hypotheses are stated in null form:

*Table 4: Subportfolios*

Variable	Category	Control Group	Experimental Group	Total
All Sectors		17	31	48
Economic Sector	Banks and Financial Sector	3	6	9
	Insurance Sector	-	2	2
	Service Sector	5	4	9
	Industrial Sector	9	19	28
<b>Total</b>		<b>17</b>	<b>31</b>	<b>48</b>
Trading Frequency	Low Traded Firms	10	10	20
	Heavily Traded Firms	7	21	28
<b>Total</b>		<b>17</b>	<b>31</b>	<b>48</b>
Firm Size	Small Size Firms	11	27	38
	Large Size Firms	6	4	10
<b>Total</b>		<b>17</b>	<b>31</b>	<b>48</b>
Firm Ownership	Domestic Ownership Firms	11	21	32
	Foreign Ownership Firms	6	10	16
<b>Total</b>		<b>17</b>	<b>31</b>	<b>48</b>
Firm Performance	Winner Firms	15	24	39
	Loser Firms	2	7	9
<b>Total</b>		<b>17</b>	<b>31</b>	<b>48</b>

### Announcement Date

Since the study deals with the impact of the disclosure of accounting reports prepared according to old accounting rules [Jordanian accounting rules (JAR)] and according to new accounting standards (IAS), details of the precise dates on which the reports were actually released to the market is essential (Brown and Warner 1980 and 1985). Furthermore, Strong (1992) points out:

*“The ability to detect information content in an event study may be considerably enhanced if the precise event day for the sample securities can be established”*

For this study, the dates of accounts releases were obtained from Jordanian daily newspapers.

### Regression Analysis

In order to estimate the parameters for the market model, daily share prices and market index were collected. As the market is still in its infancy (it lacks a computerised system and experienced management staff) much



In addition, three criteria were used in the selection of the final firms:

1. The firm must be listed on the Amman Financial Market (AFM).
2. No stock splits were announced during the test period.
3. The firm must be relatively frequently traded (Firms with 300 or more trading days during 1990 and 1991).

Therefore, the final number of firms studied after the above eliminations and selection criteria decreased to 48. The distribution of the final sample of firms used in this study is shown in Table 2.

*Table 2: Distribution of the final sample*

<b>Economic Sector</b>	<b>No. of Companies</b>
Banks and Financial Companies	9
Insurance Companies	2
Service Companies	9
Industrial Companies	28
<b>Total</b>	<b>48</b>

### **Classification of study sample (Control and Experimental group)**

In order to test our hypotheses the stocks were divided into two major portfolios (control and experimental group) depending on whether the firms adopted the (IAS) or not. The experimental group comprises firms that voluntarily adopted IAS in 1990. The control group comprises firms that did not adopt IAS in 1990. The classification of the study samples are shown in Table 3. For further analysis, the two major portfolios were divided into subportfolios according to economic sector, firm ownership, firm size, trading pattern and firm performance as shown in Table 4.

*Table 3: Classification of study sample (Control and experimental group)*

	<b>Adoption IAS (1989)</b>	<b>Adoption IAS (1990)</b>	<b>No. of Companies</b>
Control Group	No	No	17
Experimental Group	No	Yes	31
<b>Total</b>			<b>48</b>

- \* **Accounting for leases.** In Jordan, before introducing IAS 17, there were no accounting treatments or legal requirements for leases. It was left for accountants' personal opinions and judgements.

### Other differences

- \* Before introducing IAS the following were not included in Jordanian financial statements:
  - Changes in prices.
  - The effects of changes in foreign exchange rates.
  - Financial reporting in hyper-inflationary economies.

## 4. RESEARCH DESIGN

### Description of Data

Because of the small size of the Amman Stock Market, it was initially intended to include all listed companies in the study. The number of companies listed at the end of 1990 was 104 as shown in Table 1.

*Table 1: No of Companies listed on the Amman Financial Market*

Economic Sector	No. of Companies
Banks and Financial Companies	19
Insurance Companies	17
Service Companies	17
Industrial Companies	51
<b>Total</b>	<b>104</b>

### Selection of Sample Firms

A number of firms had to be eliminated from the 104 firms for the following reasons:

- i. Some firms did not publish their financial reports during the study period.
- ii. Some firms were established very recently and therefore their financial reports and their share prices were not available over the full period.
- iii. Some companies were suspended from trading by a decision of the Economic Security Committee.

issued 31 IASs. These standards deal with the substantial majority of topics that affect the financial reports of business enterprises.

### **Comparison of Jordan Accounting Practices with IAS**

Table 1 in Appendix A summarizes IAS and Jordanian accounting practices. Since a major aim of this study is to compare share price performance under the two accounting regimes it would seem appropriate to highlight, from the table, those aspects of financial reporting which could cause major differences. These are as follows:

- \* **Disclosure of reserves.** This does not occur under 'the old rules' but does under IASs.
- \* **Valuation and presentation of inventories.** Contrary of Jordanian accounting practices, IAS 2 allows the use of FIFO methods for costing inventory.
- \* **Provision relating to depreciation of tangible assets.** Contrary to Jordanian accounting practices IAS 4 allows accelerated methods of depreciation.
- \* **Provisions relating to depreciation of intangible assets.** This does not occur under usual Jordanian accounting practices but does under IASs.
- \* **Supplementary disclosure.** This does not occur under Jordanian accounting practices but does under IASs.
- \* **Changes in financial position.** Before the introduction of IAS 7 there were no legal requirements for the preparation and presentation of the statements of changes in financial position in Jordan.
- \* **Changes in accounting policies.** Before the introduction of IAS 8 there were no legal requirements for providing information regarding changes in accounting policies in Jordan.
- \* **Accounting for taxes on income.** Contrary to IASs, Jordanian legislative requirements for taxation are vague and subjective.
- \* **Reporting financial information by segment.** In Jordan, segmental reporting is legally required for banks and insurance companies but not for services and industrial companies. IASs, on other hand, require for all firms to prepare and present segmental financial information.
- \* **Accounting for property, plant and equipment.** Contrary to Jordanian accounting practices IAS 16 allows valuation of property, plant and equipment with values higher than historical cost.

## Auer (1995)

Auer (1995) investigated the information content of earning releases for investors measured under different accounting standards. Specifically, he examined the information content of 247 earnings announcements by Swiss quoted non-financial firms which have changed their accounting standard from “a lower-quality” supposed Swiss-Standard to either IAS (20 firms) or EC-Directives (15-firms) since the beginning of 1988.

Contrary to the previous empirical studies, Auer used IAS as the benchmark for GAAP instead of US-GAAP. Also, in contrary to these studies, it is not a restatement to a different accounting standard that is being examined, but a change in the home (domestic) standard which is expected to result in an improvement of information content for investors. To measure the information content of earnings announcements, Auer used the event study methodology. He used the standard market model to calculate the daily unexpected abnormal returns and calculated the cumulative abnormal return (CAR) to measure the unexpected security revisions associated with firms' earnings announcements. Auer examined the CARs for up to a maximum of 5 event windows preceding the announcement date and 5 event-windows subsequent to the announcement date. A shorter period was examined for firms which changed accounting standard at the end of the study period (1985-1994) or for forms for which no information was available for a specific year. Furthermore, he examined the information content using the Abnormal-Performance-Index (API). Auer (1995) states that:

*“The results suggest that IAS-based earnings releases do not possess statistically significant information content beyond information content of earnings releases based on the former Swiss-GAAP. Comparing IAS-based and EC-Directives-based earnings releases the results also suggest that IAS-figurers do not posses statistically significant higher information content for investors.”*

### 3. JORDANIAN ACCOUNTING RULES AND IAS

There are no standard accounting principles, auditing standards or procedures or uniform audit reports in Jordan. The accounting profession in Jordan is still in its infancy and is not sufficiently developed to be able to undertake the setting of national accounting standards. Jordanian laws are therefore the most influential factors in shaping the accounting principles applied in the preparation and presentation of financial statements in Jordan.

IASs are released by the International Accounting Standards Committee (IASC). At the commencement of this research, the Board of the IASC has

relationships. Gray (1989) identified a number of relevant research topics in this area. For example, the question of whether voluntary disclosures of significant factors attributable to foreign listings affect the cost of capital of multinational corporations. Also Gray (1989) recognizes the importance of IAS for developing countries and points out that, in an attempt to develop their capital markets, they need knowledge of the extent of necessary regulation and investor protection. To that end, Gray (1989) suggests inquiries into the relevance of International Accounting Standards (IAS) in a stock market context. Therefore, a new area for more market-based accounting research (MBAR) has been opened.

Market-based accounting research (MBAR) on the information content of earnings figures based on the IAS and its association with stock returns is relatively scarce. What is available is conflicting in its conclusions, so there is a need for more research in this area. This section reviews those empirical studies which investigate the information content of IAS-based earnings figures.

### **Niskanen et al. (1994)**

Using a sample of 37 manufacturing and commercial firms listed in the Helsinki Stock Exchange over the 19-year period 1971-1989, Niskanen et al. (1994) examined whether IAS-based earnings figures convey significant incremental information over earnings figures based on the Finnish accounting rules. Specifically, they tested the null hypothesis (after controlling for the effect of the Finnish earnings) that, there is no significant information content in the IAS earnings. Alternatively, because of the earnings management potential allowed by the Finnish accounting standards and because of the dependence of taxable income on reported Finnish earnings, they hypothesized that IAS earnings are a more full meaning measure of the firm's performance (earnings and owners equity) and consequently contain significant incremental information over reported Finnish earnings.

The incremental information content were tested by using the standard method where (market-adjusted) stock returns are regressed on unexpected earnings. The results of Niskanen et al. (1994) give support to the notion that IAS-based earnings figures convey incremental information for the Finnish stock market over earnings figures based on the Finnish accounting rules. This was shown by the significant earnings response coefficient obtained for the IAS earnings variable after controlling for the effect of Finnish earnings.

To date, evidence on whether international accounting diversity is an obstacle to investors is mixed. Choi and Levich (1990) interviewed a sample of 52 institutional investors, corporate issuers, investment underwriters, market regulators, and rating agencies in Germany, Japan, Switzerland, the United Kingdom, and the United States. Overall, half of those interviewed stated that their capital market decisions are effected by accounting diversity. A major implication of Choi and Levich's study is that accounting differences are important and effect the capital market decisions of a significant number of market participants surveyed, regardless of nationality, size, experience, scope of international activity, and organizational structure. Based on the results of their survey, Choi and Levich (1990) conclude that international accounting diversity poses a problem for international investors. In addition, they argue that additional research in international accounting needs to be conducted in order to

*“determine quantitatively the impact of international accounting diversity on the prices of securities and on the volume and location of trading in these securities.”*

Research specifically aimed at examining the information content of earnings figures prepared under different GAAP regimes in relation with firms' stock returns is relatively new. Empirical research in this area is of interest for several reasons:

- i) It may be possible to interpret the information content of earnings measured under different accounting standards for investors;
- ii) Empirical research can give an indication of the success of standard-setters in different countries in meeting information needs of stock markets; and finally,
- iii) empirical results can provide further insight into implications of the current international accounting harmonization.

The US-GAAP are still the dominating benchmark in stock market research. However, the SEC has recently accepted the cash flow statement based on IAS 7 as equivalent to US-GAAP. If SEC is going forward in easing the listing requirements at the NYSE and accepting also full accounts based on international accounting standards (IAS) as equivalent to the US-GAAP (Auer, 1995, pp. 7-8) an important question arises over whether IAS-based (instead of US-GAAP) earnings figures convey more information than earnings based on home (domestic) accounting standards of the country under investigation. In other words, is IAS-GAAP more informative than the GAAP of the country investigated?

The need for international accounting research has grown in importance due to the increased globalization of economic, social and political

The main purpose of this study is to investigate the effects of introducing IAS on the Jordanian Stock Market. More specifically, the study examines whether IAS-based earnings figures contain incremental information over earnings figures based on the Jordanian accounting practices.

## 2. LITERATURE REVIEW

The relationship between public disclosed accounting information and stock market reactions has been one of the primary streams of accounting research since Ball and Brown (1968) and Beaver (1968). This research effort, known as "market-based accounting research" (MBAR), obtained its impetus from major developments in finance theory during the late 1950s and early 1960s. This line of research takes its importance because accounting policy-making bodies such as the FASB, SEC and IASC consider the magnitude of stock market reactions to the accounting disclosure as evidence of disclosure usefulness to investors. Furthermore, these regulatory bodies usually decide issues such as the timing, frequency and components of financial reports. For making these decisions information about stock market reaction to the release of financial reports is useful.

There is a considerable empirical literature dealing with capital market reaction to accounting information. This area of research usually involves information content studies. Most of the studies on the information content of accounting data are of the "announcement type", examining whether the announcement of some economic events (i.e. earnings announcement) results in a change in the distributions of stock prices and/or trading volume activity at the time of their announcement. The empirical findings for these studies suggest that earnings releases are associated with changes in the distribution of stock performance (prices and/or trading volume). The overall implications of these studies is not only that earnings releases convey timely and relevant information to the market but also that investors use this information in their investment decisions.

Each country has its own accounting standards (Generally Accepted Accounting Principles, GAAP), which leads to considerable differences across countries in the determination of firm's earnings (international accounting diversity). Recently, many leading US policy-makers and government officials have expressed concern that international accounting diversity is an obstacle for US investors who attempt to interpret and rely upon foreign financial statements. They argue that accounting information of foreign firms which is understood and relied upon by investors in the home (foreign) market can often be misleading or misunderstood by US investors, resulting in home market investors having an informational advantage over US investors.

# The Stock Market Response to the Introduction of International Accounting Standards in Jordan

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## Abstract

This research examines the effect of introducing international accounting standards (IASs) on the Jordanian Stock Exchange during the period 1990-1991. Literature on accounting standards in general and IASs in particular is reviewed for the likely effects of IASs adoption in Jordan. A research methodology is developed using data from Jordanian IAS adopting firms (experimental group) and IAS non-adopters (control group) for 1990 and 1991 respectively. Sub-portfolios are then constructed representing the financial sector, the service sector, the industrial sector, low traded firms, heavily traded firms, small firms, large firms, domestic-owned firms, foreign owned firms, winner firms and loser firms. For all samples and subsamples, abnormal returns (for IAS adopters and non adopters) are analysed using the traditional market model but also using an average return model and a raw return model. The observed market reactions are then compared with those anticipated (or claimed by supporters of IASs adoption in the literature). The main findings are that IASs adoption does increase the information content of financial statements (as observed in abnormal returns) but that reaction occurs mainly prior to accounts release. An exception to this general effect is large firms where IAS adoption does not have an observable effect on abnormal returns around announcement date. The research also provides evidence that IASs adoption has little influence on Jordanian domestic-owned firms' share price reactions but a considerable effect of foreign-owned firms' share prices.

## 1. INTRODUCTION

In 1990 for the first time, a large portion of Jordanian firms changed to international accounting standards (IAS). This offers an opportunity to research the implications of IAS adoption not only for Jordanian firms but for other countries considering the same move.