*

: (SysTrust)
American Institute of Certified Public Accountants (AICPA)
Canadian Institute of Chartered Accountants (CICA)

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.(SysTrust)

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.   :

(E-Business)

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(Paper-Based AIS)

(AICPA)

(CICA)   (Computer- Based AIS)

(SysTrust)

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: "   "

:   "Remoteness Gap"
(SysTrust)

.(WebTrust)

(Quality Assurance Services)

(2007)

.   (SysTrust)

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.(2001   )

خدمات توكيد الثقة

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(www.aicpa.org) :   "

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" :   (SysTrust)

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.(Shane, 2005)

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(Computerized Systems)   -

" :   (WebTrust)

.(2008   )
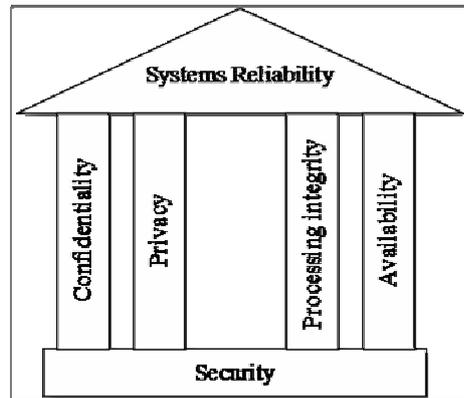
(Web   Trust   Criteria   and

.Principles)

(1)

(SysTrust)   **(SysTrust)**

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(   )

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(WebTrust)

"   "

1997

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Romney & Steinbart, 2006, P.238 /

(WebTrust)

(SysTrust)

Information Privacy –

of Customers 2003 .

(AICPA & CICA)

.(2004)

(SysTrust)

(1)

Processing Integrity Principle –

: .

System Security Principle –

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.(www.aicpa.org)

System Availability Principle – .( )

(AIS)

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.(FFIEC, 2003)

.(Romney and Steinbart, 2006)

(Kalakota and

.Whinston, 1999)

(Gupta, 2000)

Information –

Confidentiality Principle

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.(2007

(Elliot, " (Computer-Based

1997) Accounting Information Systems)

(Systems : .

(Web Trust) (Paper-Based AIS)

Trust) (Computer- Based

AIS)

(www.aicpa.org)

(Baily and :

Andrew, 2000)

(Committee of Sponsoring Organizations COSO, 1992)

:

(COSO) .

. (Control :

(Control Activities) Environment)

(Risk Assessment)

.(Monitoring) (Communication Systems)

(COSO)

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(Lee, 1993) .

(COSO)

(2006)

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(Trust Gap)

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(Quality Assurance

(Anthony and " Services)

Ronald, 2000)

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(2003   )   (Hunton et al.,   .
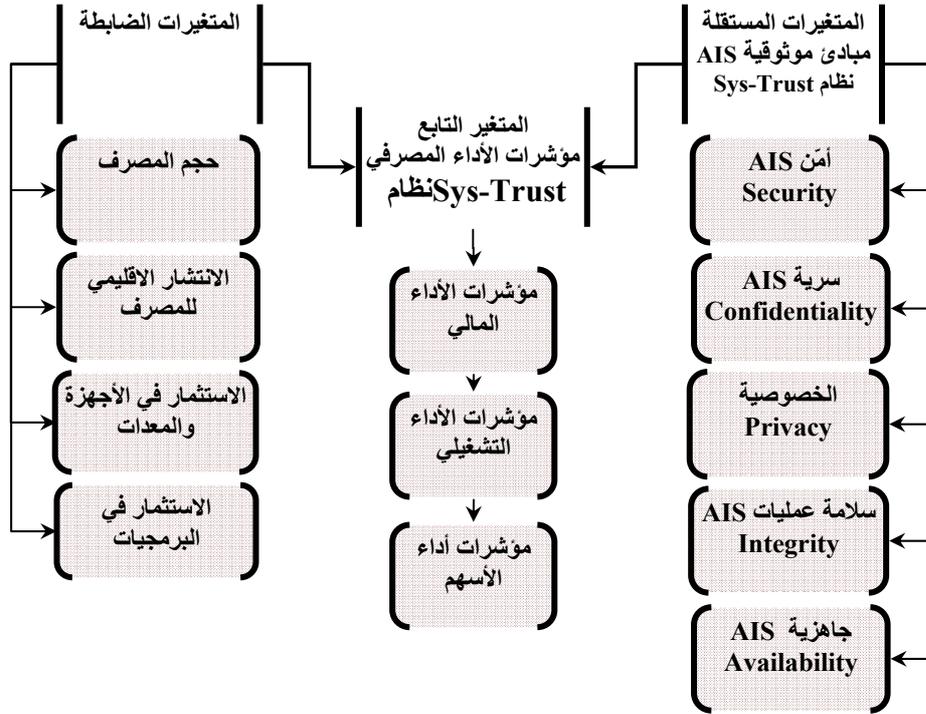
2000)

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(2005

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(2003   )

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(2)

المتغيرات الضابطة | المتغيرات المستقلة
مبادئ موثوقية AIS
نظام Sys-Trust

المتغير التابع
مؤشرات الأداء المصرفي
نظام Sys-Trust

حجم المصرف

أمَن AIS
Security

الانتشار الاقليمي
للمصرف

مؤشرات الأداء
المالي

AIS سرية
Confidentiality

الاستثمار في الأجهزة
والمعدات

مؤشرات الأداء
التشغيلي

الخصوصية
Privacy

الاستثمار في
البرمجيات

مؤشرات أداء
الأسهم

سلامة عمليات AIS
Integrity

جاهزية AIS
Availability

.

( ) (2007)

(2007
)

(2008
(SysTrust)

.

.(SysTrust V.1)

" (Efficiency) : .

"

" (Effectiveness)

"

(SysTrust)

(SysTrust V.1)

(2)

:

(1)

(SysTrust)

18	%25	(AIS)	
11	%15	(AIS)	
9	%14		
18	%25	(AIS)	
15	%21	(AIS)	
71	**%100**		

(SysTrust)

(SysTrust)

(SysTrust)

(AIS)

(Likert Scale)

:

(Interval

Return on Investment (ROI)

(Ratio Scale)   Scale)

:(2007   )

Net Profit Margin (NPM)

(   )

Operating Return On Assets

(ROA)

1-20	21-40	41-60	61-80	81-100
10.5	30.5	50.5	70.5	90.5

*   . 90.50 = 2 /(100 + 81)*

Profitability of Employee (PE)

)

Earning Per Share (EPS)   (

2007

:(Mays and Shank, 2001)

(Besley and

.Brigham, 2005)   **Market Value Added (MVA)**

(   )

(   )

)

.(2007

.

H01:

(Dummy Variable) (1) **(SysTrust).**

. (0)

:

:H01_1

.

:H01_2

.

:H01_3

(2007)

:H01_4 .

. .

:H01_5

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H02: .

.

:

.

:H02_1

: .

:H02_2

(SysTrust)

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:H02_3

. .

:H02_4

. .

:H02_5 :

.

$:H02_6$ $:H03$

.(SysTrust)   .

(2)

Jarque-Bera Test	
Sig.	J-B
0.570	1.123
0.195	3.266
0.444	1.624
0.481	1.464
0.251	2.763
0.171	5.133
0.000	141.134
0.000	181.216
0.000	207.952
0.714	0.674
0.000	121.542
0.000	38.070
0.000	158.186
0.000	121.013

(15)   .

(6)

.

(2007)

.

(3)

						1
					1	-0.074
				1	0.981	-0.073
			1	0.422	0.403	0.128
		1	0.808	0.287	0.298	0.243
	1	0.522	0.419	0.066	0.078	-0.281
1	0.225	0.145	0.295	0.102	0.107	-0.034
0.349	0.494	0.301	0.421	0.265	0.238	0.167

(4)

(Variance Inflation Factor)

Collinearity Statistics		
VIF	**Tolerance**	
2.055	0.487	
28.247	0.035	
29.673	0.034	
4.128	0.242	
4.182	0.193	
3.217	0.311	
1.239	0.807	
2.258	0.443	

:

(J-B)

) %5 (Sig.)

:

Normal-Distribution Test .

(

.

(Ln) (Jarque-Bera)

(J-B) .

%5 .(2)

. (Jarque-Bera Test)

(   )   **Multicollinearity Test**   .

(10)   (VIF)   (General Linear Model:

GLM)

(Independency)

.

(2003   )

Autocorrelation Test   .

(Pearson Correlation)

.   %60

(Collinearity Diagnostics)

(Durbin Watson Test)   (Tolerance)

(Variance Inflation Factor VIF)

)   (4   0)

(2.5 − 1.5)   (2003

(VIF)   (Gujarati, 2003)

D-W   (10)

D-W   .(5)   .

(N=21)

D-W   (K=7)   :

.($d_L = 0.547$)   ($d_U = 2.460$)

(4-d_U =   (d_U = 2.46)   (D-W)   (3)

1.54)   (Pearson-Correlation)

(Gujarati, 2003)

.(2.5 − 1.5)

(5)   (0.60)

Durbin Watson	
D-W	
1.734	:
1.986	:
2.426	:
2.000	:
1.906	:
2.409	:

(Collinearity Diagnostics)

(4)   .

(Variance Inflation Factor: VIF)

(10)

*

.(SysTrust)

(6)

	F-statistic	Prob.
:	2.458	0.119
:	0.559	0.827
:	2.556	0.109
:	1.044	0.502
:	0.257	0.983
:	1.325	0.367

(7)
(SysTrust)

	Security	Confidentiality	Privacy	Integrity	Availability
	0.824	0.760	0.701	0.805	0.800
	0.870	0.840	0.843	0.912	0.893
	0.410	0.540	0.280	0.345	0.343
	0.107	0.133	0.194	0.173	0.185
	0.738	0.590	0.720	0.770	0.722
	0.813	0.760	0.870	0.813	0.870
	0.580	0.420	0.590	0.560	0.570
	0.131	0.114	0.104	0.129	0.130

(E-Views) .

Heteroskedasticity Test .

(White). (SysTrust)

(Heteroskedasticity)

(6).

(6) (White) (7).

0.05 .

(White)

:   .

%82.4   (7)

(7)   (AIS)

%80.5

.

%10.7

.

.%77

%73.8

.

.

.

%80   (7)

%89.3   %76

%34.3   (SysTrust)

.

%72.2

.   .

:

.%59

.

.   :

(7)   .

%70.1

.

(21)

(Cross Sectional Data)   %72

.

E-Views   (Multiple Regression)

.

.(Ordinary Least Squares OLS)

(8)

	Coefficient	t-Statistic	Prob.
		OLS - Multiple Regression	
	0.661	4.084	0.001
	0.830	2.433	0.004
	0.414	4.814	0.000

β $(17 = 21-3-1$ $n-p-1)$ n   p
1.740.   %5   t

(9)

		Adj. R^2
	8	%88.1
	3	%60.5

t-test

:   %5

.   .

(β)

.

.   (2007)   .

.(Adjusted R-square)

.

(Adjusted R-square)   (Adjusted R-square)

(Thomas, 1996)   (9)

(Stepwise Regression)

(2005)   .(Adj. R^2)   (9)

(8)   (Adj. R^2)

%60.5

:

(8)   %88.1   (Adj. R^2)

.   (SysTrust)

(10)

(SysTrust)   (AIS)

	One Sample t-test		
	Prob.	t-test	Mean
AIS	0.000	7.751	0.800
	0.000	3.463	0.711
	0.002	2.859	0.706
AIS	0.000	5.594	0.795
AIS	0.000	4.742	0.777

t   %95   n-1   : 1.725

(11)

(SysTrust)

	F	Sig.	R^2
MVA	8.250	0.001	0.846
ROI	8.002	0.010	0.354
NPM	5.504	0.002	0.623
ROA	4.205	0.005	0.595
PE	10.349	0.000	0.189
EPS	19.475	0.000	0.728

*

.

*   F   %5   (p   p   β   = 8)   n-p-1

(21-8-1=12   3.28.

.

:H02

(Multiple

Regression)   (OLS)

.(11)

.

.   **:H02₁**

.

(SysTrust)

:

(10)

$$\begin{bmatrix} MVA_i = \alpha + \beta_1 prol. + \beta_2 Size + \beta_3 Soft. + \\ \beta_4 Security + \beta_5 Conf. + \beta_6\, Pr\,ivacy + \\ \beta_7 Integ. + \beta_8 Avail. + \ell_i \end{bmatrix}$$

(One Sample t-test)   .

:MVA

: α

(SysTrust)   :β₁,..₈   .

:Prol.   :

(SysTrust)   1)

$\left[H_0 : \mu_{1..5} < 0.6 \right]$:   .(0   )

:Size   :

.

(SysTrust)   :Soft.   :

$\left[H_a : \mu_{1..5} > 0.6 \right]$.   .

(SysTrust)   %60   :Security   .(AIS):

t-test   :Conf.   :

t-test   .(AIS)

%5   :Privacy   :

.(AIS)

.(AIS)   :Intrg.   .(AIS):

.(AIS)   :Avail.   :

R²   (11)

.   %84.6

2011 1   38

:NPM

R^2 (11)

.%62.3

8.250   F

4.504   F   3.280

3.280   %5

%5

:H02$_2$

:

:H02$_4$

$$ROI_i = \alpha + \beta_1 prol. + \beta_2 Size + \beta_3 Soft. + \beta_4 Security + \beta_5 Conf. + \beta_6 privacy + \beta_7 Integ. + \beta_8 Avail. + \ell_i$$

$$ROA_i = \alpha + \beta_1 prol. + \beta_2 Size + \beta_3 Soft. + \beta_4 Security + \beta_5 Conf. + \beta_6 Pr\,ivacy + \beta_7 Integ. + \beta_8 Avail. + \ell_i$$

:ROI

R^2 (11)

:ROA

R^2 (11)   .%35.4

.%59.5

8.002   F

F   3.280

3.280   2.205   %5

%5

(AIS)

:H02$_3$

:H02$_5$

$$NPM_i = \alpha + \beta_1 prol. + \beta_2 Size + \beta_3 Soft. + \beta_4 Security + \beta_5 Conf. + \beta_6 Pr\,ivacy + \beta_7 Integ. + \beta_8 Avail. + \ell_i$$

$$PE_i = \alpha + \beta_1 prol. + \beta_2 Size + \beta_3 Soft. + \beta_4 Security + \beta_5 Conf. + \beta_6 Pr\,ivacy + \beta_7 Integ. + \beta_8 Avail. + \ell_i$$

PE: .   .

(11) R^2

18.9%.

$H02_6$:

F   10.349

3.280

5%

(12)

(SysTrust)

Prob.	t-test				(SysTrust)
0.136	-1.556	0.107	0.824		
		0.131	0.738		
0.013	-2.751	0.133	0.760		
		0.114	0.590		
0.824	0.226	0.194	0.701		
		0.104	0.720		
0.662	-0.444	0.173	0.805		
		0.129	0.770		
0.360	-0.938	0.185	0.800		
		0.130	0.722		

T   95%   19   1.729.

F   19.475

3.280

5%

$$\left[\begin{array}{l} EPS_i = \alpha + \beta_1 prol. + \beta_2 Size + \beta_3 Soft. + \beta_4 Security + \\ \beta_5 Conf. + \beta_6\, Privacy + \beta_7 Integ. + \beta_8 Avail. + \ell_i \end{array} \right]$$

.

.

EPS: .   H03:

(11) R^2

72.8%.   (SysTrust).

:

$$\left[H_0: \quad \mu_1 - \mu_2 = Zero\right]$$
$$.\left[H_a: \quad \mu_1 - \mu_2 \neq Zero\right]$$

.

(12)   :   .

%70.1

0.194

%72   .

0.104   (Independent   Samples   Test)

(12)

0.226 t-test

0.824   t

0.05   :   (SysTrust)

:   .

.   %82.4

0.107

:   .

0.131   %73.8

(AIS)

0.173   %80.5   t   1.556 t-test

0.05

0.129   %77

t-   .

t   0.444 test

0.05   0.662   :   .

%76

0.133

.   0.114   %59

:   .

(12)

t   2.751 t-test

0.185   %80   0.05

0.130 %72.2

%70.6

.%77.7 %79.5

(2008)

0.938 t-test

0.360 t

0.05

(SysTrust)

(2005) .

.

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(SysTrust)

.1

:

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.2

.(SysTrust)

(SysTrust)

:

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.3

(SysTrust) :

(SysTrust)

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. :

. **(SysTrust)**

(SysTrust)

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(2008) %80

%71

.(SysTrust)

(AICPA)

:

(SysTrust)

2007

2008

:

2004

2001

2003

2008   SPSS

(   )   1998 IFAC

.742 – 702   SPSS   2003

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2004

2006

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2001

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SPSS

2003

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The Reliability of Accounting Information Systems and their Impact on Upgrading Banking Performance Indicators

Comparative Study of Jordanian and Palestinian Banks Listed at Amman and Nablus Stock Exchanges

Sabri M. Mushtaha, Allam M. Hamdan and Talal H. Shokor*

ABSTRACT

This study aims to measure the reliability of electronic accounting information system at both Jordanian and Palestinian banks, through out testing the availability of system trust principles (Sys Trust) set by American Institute of Certified Public "AICPA" and Canadian Institute of Chartered Accountants "CICA".

The five set principles is to ensure the trustability and reliability of electronic accounting system were tested on Palestinian and Jordanian banks financial, operational and stocks performance indicators.

This study tested the variances of including the (SysTrust) between Jordanian and Palestinian banks accounting information system, and by using appropriate data collection and data analysis tools findings are as following:

- Computerized accounting systems of Jordanian and Palestinian banks give a statistical indication of the (SysTtrust) principles but at different levels. Moreover, the study found that there is statistical indication that accounting information systems make (SysTrust) principles available in financial and operational performance of the banks. But the study didn't find any difference of statistical significance between Jordanian and Palestinian banks concerning the availability of credibility principle (SysTtrust) in their (AIS).

Accordingly, the study recommends the following: internal auditor should supervise the credibility of computerized systems, and that regulating and supervisory authorities of banks in Jordan and Palestine adopt the credibility as a controlling factor in the banking industry in both countries.

Keywords: Control, Reliability, Accounting Information Systems, Performance Indicators, Banks.