

Management Accounting Practice in Palestine: An Empirical Evidence

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Abstract

The competitive global environment in which companies operate has been steadily becoming more challenging and demanding (Johnson and Kaplan, 1987). During the past three decades, conventional cost and management accounting practices have been under extensive criticism for their malfunction to instigate change and their inability to support management accounting innovations in coping with the requirements of a changing environment. Major acquisitions in Palestine increased the demand for more sophisticated and advanced management accounting information in order to react appropriately to external market pressures. Current study reviews the evolution of cost and management accounting innovations over the past century around the world, and to examine whether there has been a significant impact of management accounting in the organization. Firms in Palestine needed to cope regularly with various different determinants of accounting standards, and to focus on the manner through which management accounting is being used in the prevailing Israeli army occupation and the organic economic ties with Israel. Constraints and contingency theories would be an empirical base to increase understanding of the factors that explain how firms in Palestine adopt problem-solving management accounting practices.

Keywords: Management accounting ; evolution ; traditional accounting system ; activity-based costing (ABC) ; generally accepted accounting principle (GAAP) ; international accounting standards (IAS) ; international accounting standards board (IASB) ; financial reporting standard (FRS); financial and management accounting committee (FMAC) ; international federation of accountants (IFAC); chartered institute of management accountants (CIMA); grenzplankostenrechnung (GPK); theory of constraints; contingency theory; strengths, weaknesses, opportunities and threats (SWOT).

Introduction and Objectives of the Study

The International Federation of Accountants –IFAC (1989; 2011) that is comprised of 167 member and associate organizations in 127 countries and jurisdictions worldwide, issued a statement summarizing the scope, purposes and concepts that underlies concerns with management accounting field of work. Management accounting forms an integral part of the management functions in organizing, planning, directing, and controlling, where it provides essential information to the business in its decision-

making processes. Also, the Chartered Institute of Management Accountants –CIMA , the Institute of Management Accountants- IMA, and the American Institute of Certified Public Accountants- AICPA extended the definition of management accounting practice into strategic, performance and risk managements (Horngren et al., 2005).

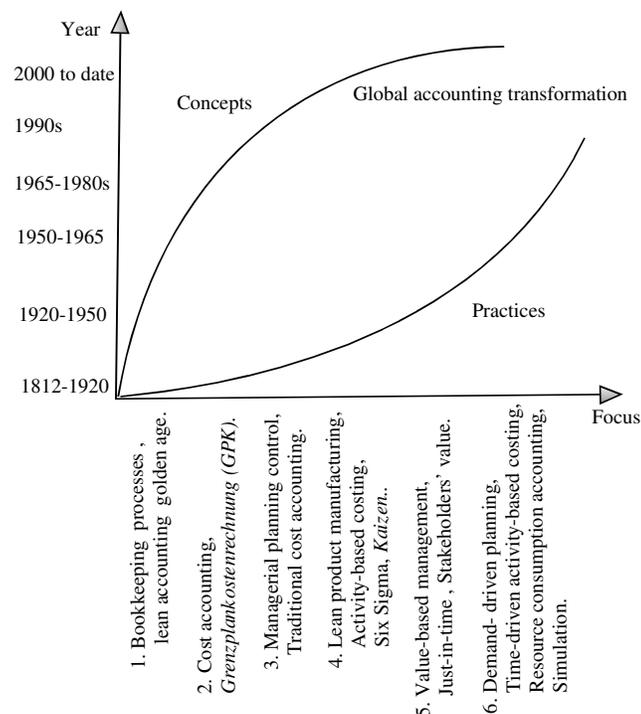
The scope of management accounting that is also called internal accounting is a field of accounting work that provides economic and financial information for internal interested users to assist them in making effective and efficient decisions. It relates to applying basic accounting process to business events data, which includes identifying, measuring, accumulating, classifying, recording, analyzing, preparing, summarizing, interpreting and communicating information gathered specially from cost accounting and used by management to plan, evaluate and control within an entity and to assure effective use of resources in order to meet business strategic objectives (Ashton et al., 1995; Drury, 2004; Atkinson, et al., 2007).

The Anglo-American or Western approach has revolutionized the cost determination, financial control, accounting information for effective policy and strategy making, efficient use of resources in business processes and product quality improvement (Foster, 2010).

Garrison et al. (2011) have identified activities that are part of management accounting, such as: (1) Explaining manufacturing and nonmanufacturing costs and how they are reported in the financial statement, (2) Computing the cost of manufacturing a product or providing a service, (3) Determining the behaviour of costs and expenses as activity levels change , (4) Forecasting profit planning and budgeting, (5) Controlling costs by comparing actual results with planned objectives and standard costs, and (6) Compiling and presenting data for management decision- making. Managerial accounting is applicable to all types of businesses and to all forms of business organizations. It is also applicable to both profit-oriented enterprises and as well as not-for-profit entities.

Therefore, management by facts enhances higher value-added to decision-making that is inherently predictive but it is based on sound collection and analysis of data. A major consideration in business performance improvement dictates the creation and use of performance measures or indicators (Feigenbaum, 2008). Hence, this field of organizational activity encompassed by management has developed through six evolutionary changes yet recognizable stages from Western perspective (Fig.1).

Figure 1: Change of the focus of management accounting.



Adopted from: Ashton, D., Hopper, T. and Scapens, R. (1995) "The changing nature of issues in management accounting", in *Issues in Management Accounting*, Ashton, D., Hopper, T. and Scapens, R. (eds.). Hamel Hempstead, Hertfordshire: Prentice Hall; International Federation of Accountants (1998) "International Management Accounting Practice Statement (IMAP #1): Management Accounting Concept", Financial Management Accounting Committee, March, pp.82-100; Burns, J. (2000) "The dynamics of accounting change: interplay between new practices, routines, institutions, power and politics", *Accounting, Auditing and Accountability Journal*, vol.13(5), pp. 566-596 ;Clinton, B. D. and Van der Merwe, A. (2006) "Management accounting –approaches, techniques, and management processes", *Cost Accounting*, vol. 20 (3), pp.14 -22.

The stages are not mutually exclusive, and each successive stage encompasses the concepts of both previous stage and additional ones that sprang out of new conditions. The next stage of the evolution of management accounting that focuses on the transformation of forward looking global practices such as risk management, governance, real time information and forecasting (Weygandt et al., 2010; Clinton et al., 2011; Herath, 2011; Weber et al., 2011).

As depicted in Fig.1, the characteristics of management accounting are identified in terms of some recent practices of the value chain, just-in-time, life cycle costing; inventory methods, target costing; lean thinking, production scheduling, benchmarking, strategic management accounting; total quality, SWOT analysis, activity-based costing, activity-based management; business ethics, balanced scorecard, time-base costing, etc. (Graner,1954;Spice, 1992; Ashton et al., 1995; Björnenak and Oslon, 1999; Burns, 2000; Burns and Scapens, 2000; Clinton and van der Merwe, 2006; de George, 2006;Atkinson et al., 2007; Clinton et al., 2011). The stages are as follows:

Stage 1: Bookkeeping processes and lean accounting (1812-1920) focused on cost determination and financial control. Since the use of budgeting and cost accounting technologies in production capacity was prevalent in this period, the dissemination of cost information tended to be dismal.

Stage 2: Cost accounting (1920-1950) focused on cost determination, controlling expenditure, *grenzplankostenrechnung (GPK)*, and financial control.

Stage 3: Management planning and control (1950-1965) focused on extrapolating traditional cost accounting information for effective management functions, and basic model building.

Stage 4: Lean product manufacturing (1965-1980's) focused on reduction of waste in business resources through process analysis and cost management technologies, computer information system, activity-based costing, target costing, throughput accounting, quality, *kaizen*, six sigma, and product life cycle management.

Stage 5: Value-based management (1990's) focused on creation of stakeholders' value, customer, total quality management, strategy, just-in-time, and balance scorecards.

Stage 6: Demand-driven planning (2000's) focused on activity-based resource planning, driver-based budgeting, time-driven activity-based costing, resource consumption accounting, *heijunka*, *jidoka*, economic value added, and simulation of consumption rates.

A critical difference between stage 3 and stages 4, 5 and 6 is the shift in emphasis away from information provisions and towards resource management in terms of lean product manufacturing and of waste reduction, value-based management, and demand-driven planning. However, the focus on information is never lost, but it is re-utilized as a resource, along with other resources of the organization for more effective value creation. Accordingly, management accounting is an integral part of the management process in a modern sitting of organizations. Therefore, the trend of various changes in competition, customer satisfaction, technology and organizational structure will continue to have important connotations for the nature of management accounting.

External Business Environmental in Palestine

In 1947, the UN partitioned Palestine into Arab and Israel states and the Arabs did not accept the partition and war broke out since (Gilbert, 2008). Israel won a decisive victory in June 1967 war (Bowen, 2003). The present state of Israel occupies all the land from the Jordan River to the Mediterranean Sea, bounded by Egypt in the south, Lebanon and Syria in the north and Jordan in the east (Bregman, 2002). Palestinians who accepted a two state solution of Oslo accords in 1988, were supposed to have led to a peaceful resolution of the conflict (Halliday, 2005). However, Israeli army occupation of Palestine has been instrumental in continual building and enlargement of 120 settlements with a population of about 220,000 that was resented by the local population and re-generation cycle of violence, incitement, frustration, hopelessness, serious financial problems, fragmentation of Palestinian politics and society (Cleveland and Bunton, 2008). Israeli army imposed an economic blockade and restrictions on Palestinians movement and these restrictions are significantly affecting trade routes due to sheer number of 648 checkpoints and other physical limitations in the occupied territory (UN Office for the Coordination of Humanities Affairs, 2007). Hence, Palestine that has no access to external world by land, air or sea, is completely enclaved within Israel that constitutes 78% of the land (Pappé, 2004).

The economy of the Israeli-occupied territories of Palestinian continued to face multifaceted constraints and to suffer from serious imbalances in despite of sustained and far-reaching economic and institutional reforms (Arnon, 2002). The World Bank estimated the latest gross domestic product (GDP) of Palestine US\$ 1,036 and of Israel US\$ 22,563 per year (World Bank, 2008). A growth episodes in Palestine stemmed from low bases on jobless, aid-driven that have not altered the reality of worsening long-term development prospects caused by continued loss and erosion of productive base, fragmentation of domestic markets, the construction of the separation wall in Palestine and isolation of Arab Jerusalem, land and natural resources (UN Office for the Coordination of Humanitarian Affairs, 2007). Siam (2009) has reported that decades of occupation, expansion of illegal settlements and Israeli control over access to global markets have isolated the Palestinian economy from neighboring Arab markets. Palestinian fiscal position is precarious despite continuous and far reaching efforts to achieve fiscal sustainability; a large trade deficit and dependence on the Israeli economy persist (Ravid, 2012).

UN Conference on Trade and Development (2009, August 7) that provides appropriate interventions in support of Palestinians and alleviating the economic and social repercussions of the prolonged Israeli occupation on their living conditions. The historic integration of Palestine with its Arab hinterland has been interrupted by two generations of war and Israeli occupation. Thus, it could be suggested that there is unexploited opportunities to provide substantial boost to the Palestinian economy through re-establishing its connections with the Arab regional economies (Sherwood, 2011, September 29). Although economic challenges in Palestine are serious enough even in the most enabling policy circumstances, they are compounded by Paris Protocol (1994, April 29) that does not permit any needed policy instruments to implement the corrective measures to promote Palestinian socio-economic development. For example, many key macroeconomic variables such as: interest rates, exchange rate and most of the instruments of the revenue side of fiscal policy are inherently out of the reach of the Palestinian economy policymaker. Consequently, they are very much reflective of Israeli economic policy orientation and political imperatives. Daud (2011, September 28) has argued that Paris Protocol shaped the Palestinian trade regime, which has evolved not only as a quasi customs union, defining the economic and trade relations between Israel and the occupied Palestinian territories, but as a key constraint on Palestinian development and the range of trade and industrial policies the Palestinian can pursue. Therefore, Palestinian trade dependence on Israeli economy continues unabated, in despite of a strong trade potential with Arab, European Economic Community and other Mediterranean countries (Barcelona Declaration, 1995). As a result, Paris Protocol has become a major barrier for greater Palestinian trade and economic expansion which, in the light of the failure of Palestinian development under occupation, seems a promising and viable option to sustain the Palestinian people on their remaining land (Daud, 2011, September 28).

The numerous and stifling barriers to the movement of Palestinian goods and people within the occupied Palestinian territories have fragmented the economy into isolated, disconnected islands and given rise to substantial price differentials and limited factor mobility of goods and services among them. Under the Oslo Accords (1993), the Palestinian territories were divided into three areas: Area A (17%) falls under the nominal security and civil control of the Palestinians, although the Israeli army reserves the right to enter it at will; Area B (24%) falls under Israeli security control, with Palestinians responsible for some civil affairs, and Area C (59%) falls under total Israeli civil and military control (see Appendix 1). UN office for the coordination of humanitarian affairs published an Oslo Accords Map (1993) illustrating the geography of the occupied Palestinian territories in February 2011. Area C contains virtually all Israeli settlements and settler roads, large buffer zones around them, most of the Jordan River valley, and the entire Dead Sea coast. Areas A and B are divided into many 'islands' separated from one another by Israeli-controlled Area C. Although according to the Oslo Accords of 1993, Area C was supposed to be transitioned to Palestinian control within five years, but the Israeli government continues to fill Area C with settlements and to restrict Palestinian access to it.

The generic factors of this environment do not only undermine the viability of existing businesses, but they also discourage potential domestic as well as foreign investment. Hence, Palestinian productive base was relatively eroded and deformed due to the constraints imposed by Israeli occupation that takes its toll on the development horizons and deepening the dependence on the Israeli economy and possibly a long-lasting damage (Cottier and Pannatier, 2000, January). As a result, business transaction cost are inflated due to the restrictions on the movement of Palestinian goods and people, in which distorted high market prices signal and breed inefficient management resource allocations (Hajjawi, 2011; UN General Assembly, 2012, February 7). Israeli policies therefore imposed a 'huge price tag' on the Palestinian economy by preventing Palestinians from accessing much of their land and exploiting most of their natural resources, while isolating them from global markets and fragmenting their territory into small, poorly connected 'cantons' (Daud, 2011, September 28). However, some private sector of Palestinian industrial exporters have made some economic inroads in recent years into regional Arab neighbouring markets in despite of adversity of the trade bottleneck through Israeli docks (Hajjawi, 2011; Sherwood, 2011, September 29).

Application of Theories of Constraints and of Contingency in Palestine

The theory of constraints is a new a philosophy of management paradigm and innovative improvement (Goldratt and Cox, 1986). It is based on the premise of a common idiom: "a chain is no stronger than its weakest link". In any complex system at any point in time, there is most often only one aspect of that system that is limiting its ability to achieve more of its goal(s). So, in order for that system to attain any significant improvement, the constraint must be identified and the whole system must be managed with it in mind. The thinking process and analytical tools that an integrated problem-solving methodology, derived from the science of cause-and-effect logic. These analytical tools provide the ability to identify, analyze and to develop breakthrough solutions through the premise that systematic conflicts that produce undesirable effects, are the result of erroneous unexamined assumptions. They also address communication and collaboration for successful implementation of cost-effective win-win solutions. Win-win solutions are the most desirable way to solve problems and conflicts. When you win and the other person wins, instead of one winning and the other losing, then everybody would be happy and the relationship would get stronger as a bonus (Cox and Schleier, 2010).

Business activity in Palestine is constrained by the environment in which business operates that Israeli Occupation created in the first place. Business primary and supportive value chain activities, such as research and development, production, sales and marketing, services, human resources, materials management and increased stress among employees have been hampered (Hajjawi, 2011). So, Palestinians needed to utilize the thinking processes of theory of constraints to provide the route to customizing generic solutions for their specific environment. This quest for resilience also requires

including other actions such as: Israeli competitors, legal requirements, social ethical requirements and expectations, consumers' income constraints, and production technologies constraints (Hamel and Valikangas, 2003).

The other relevant theory to the Israeli Occupied Territories of Palestine is the behavioral contingency theory that proposes the need for a conditional stimulus to produce learning (Burns and Stalker, 1961). There is no single best way to design mechanistic (centralized) or organic (decentralized) organizational structures, but an organization is contingent upon its internal and external environment that tailor the design to the sources of environmental uncertainties (Fiedler, 1964). The point here is to design an effective and efficient Palestinian organizational structure that can handle uncertainties under Israeli occupation, yet there can not be one optimal organizational design for every firm, because firms are not completely similar and every firm is confronted with its own set of unique contingencies though it shares common denominator with other firms in Palestine. Some of the important contingencies for firms are as follows: (1) Palestinian and Israeli governments' rules and regulations, (2) local Palestinian customers and Israeli competitors, (3) consumers, (4) technology, (5) Israeli suppliers, and (6) distribution chain.

Hence, performing analysis of Palestinian contingencies that also include macroenvironmental, political, economic, social and technological factors could be very helpful. Woodward (1958) argued that technologies determine organizational attributes in terms of organizational span control, centralization of authority, and the formalization of rules and procedures. However, Burns and Stalker (1961) found that firms operating in less stable and uncertain environments tend to exhibit organic organizational structure.

Research Methodology

This study has been carried out in Israeli Occupied Territories of Palestine, and it focused on obtaining primary data on the level of application of management accounting techniques practiced by selected companies. This study also aimed at obtaining empirical evidence to promote management applications in Palestinian context. This study is an exploratory study part of exploring the use of activity-based costing, but there is little known about the evolution stage and the practice of management accounting. There is hardly any local study that has been conducted in this area, but it is analogous to a wide range of studies in UK in particular (Drury and Tayles, 2000; Innes et al., 2000; Cotton et al, 2003; Hofjan and Wömpener, 2005; Al-Omari and Drury, 2007; Askarany et al., 2010).

A multidisciplinary major survey was carried out in 2009 , aimed at gathering empirical business data to provide an overview of current management accounting practices, activity-based costing system, strategic organizational learning, decision-making process and problem solving mechanisms in the aftermath of Palestinian second uprising crisis (September 2000- November 2004).

A sampling frame consisting of 339 Pal Trade firms was extracted from a CD-ROM members information data base all of which registered firms with well reputed trading standards. A population of 32 privately owned manufacturing firms that was picked up for this study was also certified by Palestinian Standards Institute (PSI). The firms were of small, medium and large-sized in terms of number of employees, capital investment and sales turnover. Many large firms in the sample operate through a divisional structure that are short of separate legal entities yet the divisions run what is equivalent to separate business units in terms of operational characteristics. Therefore, the sample design allowed the inclusion of different divisions, subsidiaries, different sites of the same firm or within the same group of companies, provided they were engaged in different activities. As the survey subject material was of a specialist in nature, it was necessary to ensure that those who complete the questionnaire were properly qualified to hold an executive post with professional qualifications. The questionnaire listed a host of management accounting techniques that are reflective of the stages of management accounting evolution. Each of 32 ISO manufacturing firms were contacted by telephone and an hour meeting was arranged to complete the questionnaire. The response rate was 100 percent of

all firms included in the survey. All questionnaire replies were registered on database and the Software Statistical Package for Social Sciences (SPSS- version 17) was used to analyze data. The current study uses descriptive statistics to analyze the phenomenological responses and other related characteristics of the sample; utilizing the mean, mode, frequency, and accumulative percentage.

Research Findings and Discussion

Clinton and Van der Merwe (2006) embraced three broad areas in management accounting: (1) cost accounting, (2) performance, evaluation and analysis, and (3) planning and decision support. These areas that can be classified into historical (1 & 2) and predictive (3), are part of the main objective of a wider study to explore the current management accounting techniques and practices adopted by selected Palestinian firms under Israeli occupation. The questionnaire listed various management techniques representatives of the six stages of management accounting evolution. All firms have listed budgets, cost and benefit analysis and product costing which are the techniques belong to Stage 3 of management accounting evolution. This finding provides evidence that major techniques of Stage 1 (income statement analysis, cash flow analysis, balance sheet analysis, financial ration analysis, SWOT analysis, statement of equity) , Stage 2 of *grenzplankostenrechnung*, and of Stage 3 (budget, cost and benefits analysis, product costing, standard costing, cost-volume-profit analysis, absorption costing, process costing, batch costing) of management accounting are dominantly applied in practice. This study has found that computers and accounting software enterprise resource planning (ERP) system packages are employed in cost measurements, Stage 4 has been infused. The software programmes provide an "audit trail" that enables the tracking of all transactions. Palestinians sample firms use software packages for enabling internal control and network-compatibility which is criterion of Stage 4.

Table 1 illustrates the use of budget in management accounting practice.

Table 1: Descriptive statistics of budget importance

Features	N	Min	Max	Mean	Std. Deviation
Cost control	32	2	5	4.1250	0.9755
Performance evaluation	32	3	5	4.2188	0.7064
Compensation	32	1	5	3.4063	1.1031
Operational planning	32	2	5	4.1875	0.8206
Decentralization decisions	32	1	5	3.7188	1.1977

Note: A five-point scale (1= 'not important' and 5='critically important').

Data had drawn from Question 35 (budget importance).

Respondents were asked to indicate importance of the budget in the functions of various enterprise activities. Table 3.25 shows that 'performance evaluation' had the highest mean value (4.2188), followed by 'operational planning' (4.1875), 'cost control' (4.1250), and proceeded by 'decentralization decisions' (3.7188). Hence, budget would be the reference measurement for 'performance evaluation' among other important parameters of 'operational planning' and 'cost control'.

Chi-Square frequency (Table 2) test shows that the maximum value was 'the extent of Israeli occupation' (28.125), followed by 'the diversity of products manufactured' (21.125), whereas 'application of activity-based costing (3.125) was the one before last, followed by the least value of 'extent of use of lean production techniques' (0.125). It is evidently shown that the distribution channel influenced the product costing due to Israeli occupation.

Table 2: Chi-Square test of influences of product costing system

Variable	Observed N	Expected N	Residual	Chi-Square ^a	df	Asymp. Sig.
<u>Information processing technology costs:</u>				6.125	1	0.013
Yes	23	16.0	7.0			
No	9	16.0	-7.0			
Total	32					
<u>The degree of competition faced:</u>				6.125	1	0.013
Yes	23	16.0	7.0			
No	9	16.0	-7.0			
Total	32					
<u>The diversity of products manufactured:</u>				21.125	1	0.000
Yes	29	16.0	13.0			
No	3	16.0	-13.0			
Total	32					
<u>The number of products produced:</u>				15.125	1	0.000
Yes	27	16.0	11.0			
No	5	16.0	-11.0			
Total	32					
<u>The proportion of overhead (indirect) costs that cannot be directly product assigned:</u>				18.000	1	0.000
Yes						
No	28	16.0	12.0			
Total	4	16.0	-12.0			
	32					
<u>Application of activity-based costing:</u>				3.125	1	0.077
Yes	21	16.0	5.0			
No	11	16.0	-5.0			
Total	32					
<u>Size of enterprise:</u>				18.000	1	0.000
Yes	28	16.0	12.0			
No	4	16.0	-12.0			
Total	32					
<u>Extent of use of lean production techniques:</u>				0.125	1	0.724
Yes	15	16.0	-1.0			
No	17	16.0	1.0			
Total	32					
<u>Extent of Israeli occupation:</u>				28.125	1	0.000
Yes	31	16.0	15.0			
No	1	16.0	-15.0			
Total	32					

Note: Data had drawn from Question 27 (influences of product costing system).

^a 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.0 and the observed frequencies are listed in Table 3.16. Residual is the difference between observed and expected frequencies. At the 0.05 level of significance.

Individual respondents were asked to indicate the means they used for adjusting their enterprises to the conditions of Palestinian economic crisis as a result of the second uprising (September 2000-November 2004) and the introduction of 100s of Israeli army checkpoints and a series of physical obstacles such as road blocks, road gates, earth mounds and trenches. Shearer (2006), head of the UN Office for the Coordination of Humanitarian Affairs in Jerusalem, has reported that the total number of these manned checkpoints had steadily risen, from 376 in August 2005 to 535 in June 2006; there was also increasing numbers of 'flying' or random checkpoints averaging more than 160 a week.

All enterprises' participants (32) claimed that employees of their enterprises had understood the changes in the external environment of the economic crisis. Table 3 shows Chi-Square for

'performance improved' (26.759), 'training received' (24.500), 'solutions generated' (21.250), 'behaviour altered' (15.438), 'problems analyzed' (14.313), 'external environment understood'. (13.188), "policies changed" (11.313), and "enterprise restructured" (10.750). The expected N was 10.7 for "policies changed", "external environment understood", "enterprise restructured", "problems analyzed", and for "behaviour altered", 8.0 for "solutions generated" and for "training received", and 6.4 for "performance improved".

Table 3: Mann-Whitney (NPar), Chi-Square and frequencies statistics for enterprise adjusting to the changed conditions since the Palestinian economic crisis

Features	Observed N	Expected N	Residual N	Chi-Square ^{a,b,c}	Df	Asymp. Sig.
<u>Policies changed:</u>				11.313	2	0.003
moderately important	2	10.7	-8.7			
very important	13	10.7	2.3			
critically important	17	10.7	6.3			
Total	32					
<u>External environment understood:</u>				13.188	2	0.001
moderately important	1	10.7	-9.7			
very important	15	10.7	4.3			
critically important	16	10.7	5.3			
Total	32					
<u>Enterprise restructured:</u>				10.750	2	0.001
moderately important	2	10.7	-8.7			
very important	14	10.7	3.3			
critically important	16	10.7	5.3			
Total	32					
<u>Problem analyzed:</u>				14.313	2	0.001
moderately important	1	10.7	-9.7			
very important	13	10.7	2.3			
critically important	18	10.7	7.3			
Total	32					
<u>Solutions generated:</u>				21.250	3	0.000
little important	1	8.0	-7.0			
moderately important	2	8.0	-6.0			
very important	14	8.0	6.0			
critically important	15	8.0	7.0			
Total	32					
<u>Training received:</u>				24.500	3	0.000
little important	1	8.0	-7.0			
moderately important	1	8.0	-7.0			
very important	15	8.0	7.0			
critically important	15	8.0	7.0			
Total	32					
<u>Behaviours altered:</u>				15.438	2	0.000
moderately important	1	10.7	-9.7			
very important	12	10.7	1.3			
critically important	19	10.7	8.3			
Total	32					

Table 3: Mann-Whitney (NPar), Chi-Square and frequencies statistics for enterprise adjusting to the changed conditions since the Palestinian economic crisis - continued

<u>Performance improved:</u>				26.750	4	0.000
not important	1	6.4	-5.4			
little important	1	6.4	-5.4			
moderately important	3	6.4	-3.4			
very important	14	6.4	7.6			
critically important	13	6.4	6.6			
Total	32					

Note: Data had drawn from Question 66 (adjusting to Palestinian economic crisis).

a 0 cells (0.0%) have expected frequencies less than 5. The minimum expected frequency is 10.7

b 0 cells (0.0%) have expected frequencies less than 5. The minimum expected frequency is 8.0

c 0 cells (0.0%) have expected frequencies less than 5. The minimum expected frequency is 6.4
At the 0.05 level of significance.

The techniques of Stages 4, 5 and 6 (Fig. 1) were not practiced by the selected Palestinian firms. Finally, total quality management and Kaizen quality improvement costing were found to be least priority technique applied by Palestinian manufacturers. Although material resources planning which a world-class manufacturing technique and an advanced form of management accounting, has not been figured prominently. Yet, Palestinian firms must be doing it well to overcome the hindrance of physical Israeli barriers of raw materials schedules (UN Office for the Coordination of Humanities Affairs, 2007; Shaoul, 2012 February 28).

The results of this investigation show that the application of Stage 1 (bookkeeping processes and lean financial accounting data), Stage 2 (Cost accounting *grenzplankostenrechnung-GPK*) and Stage 3 (Management planning and control) are still dominantly applied in practice by the selected Palestinian firms. Yet, the practice of adapted management accounting techniques in Palestine is fully improvised as a result of unique constraints and contingency chronic elements. The practice satisfies local needs though it mirrors advanced management accounting to gain effective and efficient performance of resources usage, especially in immediate and medium future policy planning.

The empirical findings in this study provide a new understanding of Palestinian firms' application to the concept of sound management accounting practices in their own way in order to survive in the competitive and ever-changing world; they are just doing that.

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Appendix 1: Oslo Accords Map (1993)

