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**Evolution of financial information and
management control over the last 150
years. The case of Bodegas Torres**

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Evolution of financial information and management control over the last 150 years. The case of Bodegas Torres¹

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Abstract

This article describes the most relevant milestones in the development of both financial information and management control, from the inception of the business up to the present day but particularly over the last 150 years. As a case study, it sets out the development of the wine producing company Bodegas Torres, a family group with its headquarters in Vilafranca del Penedés (Barcelona). It is a company renowned for its innovation and excellence in the world of wine producing, but also in management, including its financial information and management control practices.

Keywords

Financial information, Management control, Winemaking, Miguel Torres.

JEL Codes: M41, M42

Introduction

Accounting, just like any other management discipline, must adapt and innovate in line with changes in the environment and the changing needs of companies. The aim of this article is to relate the development of both financial information and management control with the changes in the overall economic environment and to the priorities of companies. To do this the article sets out the most landmark moments in the history of accounting and how they relate to the general evolution of the economy. The analysis is focused on the last 150 years given that this is when most innovations have taken place in accounting.

In order to better understand how accounting practices have developed, we have used the case of the wine producing company Bodegas Torres, a family group with its headquarters in Vilafranca del Penedés (Barcelona). This company was chosen for two reasons. Firstly, the company was founded in 1870 so it now has almost 150 years of history behind it. This century and a half coincides with the period in which accounting on an international level has developed most and is precisely the period which is being analysed in most depth in this work. Secondly, Bodegas Torres, is a very successful company which is known for its competitive edge with regard to innovation and excellence in all areas (viniculture, operations etc.) and also in terms of accounting.

In the next section we summarise the landmark moments in the history of accounting which have aimed to address the changes in the economic environment. Then the company Bodegas Torres is introduced and its early years are described while focus is made on the present day and its current situation. Finally, we analyse how Bodegas Torres has changed in the area of accounting throughout its long history up to the present day.

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The development of financial information and management control practices to address changes in the environment, regulation and the needs of companies.

From the beginning to the Renaissance

The first evidence of the existence of accounting dates back to 3,500 years before Christ in ancient Mesopotamia (which covered the area which is present day Iraq, Kuwait, Syria and Turkey) and was related to trade and taxes which financed the activities of the temples (Taylor et al, 1983). This period produced the first accounts registers on clay tablets which gave information about the profits obtained from the harvests and it was the base for calculating taxes (see figure 1).

More evidence comes several centuries later (3,000 years before Christ) in Ancient Egypt, Babylonia, India and China. In Ancient Egypt for example, in some of the Pharaohs' tombs, clay tablets have been found with accounting notes related to taxes. In these countries there were systems which controlled the entry and existence of stock which were done orally given that the movements were explained to the tax inspectors in person. In fact they were the first audits (from the Latin "*audire*", which means to hear) which were to continue until the Middle Ages. From this period comes the first evidence of management accounting, when in China during the Chao dynasty (1,122-256 years before Christ) systems were set up to assess Government programmes.

Following this, the coin was introduced in Ancient Greece. The Roman Empire then introduced the use of a cash ledger for the accounting of family expenses.

From the Renaissance to the XVII century

An important qualitative jump came in the Renaissance, a period in which Holland and northern Italy saw the birth of the first capitalist societies. In 1497, Luca Pacioli published his book *Summa de Arithmetica, Geometria, Proportioni et Proportionalità* in which he expounded on the double-entry which was the basis for the accounting system which is still used today. Although management accounting started to develop some centuries later from the first Industrial Revolution onwards (Thomas, 1960), Pacioli also made inroads into management accounting such as the budget and variance calculation (Vangermeersch, 1986).

With regard to financial accounting, the major changes have normally been reactions to accounting and/or financial scandals. For example we can go back to the case of the Dutch East India Company. This company, created in 1602 is considered to be one of the first multinational companies and the first company whose shares could be traded in an official Stock Exchange (in Amsterdam). A few years later, there were some significant problems due to poor business management brought on by various circumstances. Among them, we can highlight the fact that as a shareholder's right to access information wasn't regulated, the company didn't inform its small shareholders about their accounts. Complaints led to the authorities forcing the companies to supply information to their shareholders. This in turn led to companies employing auditors so that the accounts were not tampered with.

Shortly afterwards the first Industrial Revolution began and this would lead to an important qualitative jump in the development of regulation and accounting practices.

	Major events and transformations	Impact on financial information	Impact on management control
3,500 years before Christ	Taxes to finance activity of temples in Ancient Mesopotamia.	Hammurabi Code. Accounts registered on clay tablets.	
3,000 years before Christ	In Ancient Egypt, Babylonia, India and China.	Accounts registered on papyrus. First audits: Orally controlled systems of entry and exit of stocks which were given in person to the tax inspectors.	Evaluation of government programmes in China.
1,200 years before Christ – 146 years before Christ	Ancient Greece.	Introduction of the coin.	
27 years before Christ – V century	Roman Empire.	Cash ledger for family expenses.	
Middle Ages (V to XV centuries)	Feudal Lords and Royalty introduce taxes to finance themselves.	Those in charge of raising money used inspectors (auditors) to keep a check on fraud and calculate taxes.	
Renaissance (XV and XVI centuries)	In Holland and the north of Italy the first capitalist societies are created.	Luca Paccioli introduces the double-entry.	Luca Paccioli introduces techniques such as the cash ledger and variance analysis.
XVII century	First multinationals and companies trading on the Stock Exchange in Holland.	Various scandals lead to regulatory changes which mean that shareholders now have to be informed. Companies start using external auditors to ensure the accounts are correct.	

Figure 1. Principal stages which explain the evolution of financial information and management control from its beginning to the XVII century

From the First Industrial Revolution up to the current day

Although the first evidence of the existence of accounting registers was in previous centuries, it was from the first Industrial Revolution onwards (XVIII century) when a continuous process of accounting innovations was set up which focused on Direct Costing and the control of production.

Then with the second Industrial Revolution in the XIX century, large companies started to spring up (railway companies for example) in which the ownership was different from the control which led to these companies themselves starting to arrange for external auditing (Chandler, 1977). So for example, from 1880 onwards, Scottish and English capitalists who invested in North American Stock Market sent their auditors to verify that the accounts supplied by the companies were reliable.

The calculation of material costs and direct labour costs was also perfected and was based on Direct Costing (Vangermeersch, 1986).

At the beginning of the XX century, Taylor's Scientific Management and innovations such as Henry Ford's assembly line production system started to distinguish between the system of variable costs and absorption costing which meant that all the indirect costs were assigned to the units produced (Thomas, 1960). The most used distribution criteria to charge the indirect costs was the machine hour rate (Cooper, 1987).

The obligation to audit accounts and supply the audit report came decades later following the Stock Market crash in 1929. Apart from other important changes in regulations this led to companies listed on Stock Exchanges in the United States being obliged to provide their accounts information and submit them to an external audit. (AICPA, 2012). But in 1938 there was another scandal: that of McKesson & Robbins. In 1938 it came to light that this listed company had fraudulently inflated its balances of

inventories and clients by presenting false delivery notes and invoices. The auditors had approved the accounts given that in those times it was not compulsory to confirm the accounts with third parties (clients, suppliers, banks, etc.) or to physically verify the existence of inventories. Due to this scandal, the Securities and Exchange Commission of the United States was set up in 1941 making it mandatory for auditors to confirm the accounts with third parties and to physically check for evidence of the existence of tangible assets such as inventories.

With the end of the Second World War, from 1945 onwards there was an exponential increase in consumer demand which led to a significant increase in production. The Third Industrial Revolution then began with mechanization and microelectronics being among some of the breakthroughs. In Japan new production techniques were appearing (Just in Time, Kanban...) which revolutionized many sectors. Companies continued to revolutionize their control systems which merely focused on financial and production aspects. Management control was focused on financial information. The costing system which was based principally on absorbing costs (full costs) continued to develop with the Two Steps Costing System (Vangermeersch, 1986) and this started to impact on budgets and budget control (Thomas, 1960). From the 1950 onwards, French engineers (Lafarge, Pechiney, Saint Gobain...) instigated the balanced scorecard (*Tableau de Bord*) technique in diverse companies which provided production, sales, and financial information (Pezet, 2007).

In 1962, Sam Walton opened the first Wal-Mart store which revolutionized business leading to an important drop in retail prices and an improvement in the level of service. This new innovation led to the need to make costs more competitive. In large companies systems of variable remuneration based on financial information started to be put into place.

Global trade was increasing in these years. The progressive disappearance of the tariff barriers of the 80s encouraged the outsourcing of processes in many companies. This led to the need for very accurate information about costs and drivers (Troxel and Weber, 1990). The solution to this was a proposal for an Activity Based Costing system which was first developed by Staubus (1971) and then perfected by Kaplan and Cooper (1988). At this time the Target Costing technique also reached the United States and Europe even though Toyota had started to use it in 1963 (Feil et al, 2004).

Therefore, gradually new disruptive changes appeared. In 1995, Jeff Bezos created Amazon, which would bring about a revolution in trading thanks to the internet. And at the same time an interest in dimensions such as quality and customer and employee satisfaction started to grow. The control of financial information led to control with people (employees and clients) being given more of a say. So instruments such as the *Balanced Scorecard* were needed and it was conceived as an instrument to improve information about the company while finding a balance between financial and non-financial indicators (Kaplan, 1994).

This took place at the same time as there was a growing interest in investing in the Stock Market which explains why in many companies, particularly in the United States, priority was given to creating value for the shareholder. This explains the development of incentive systems based on EVA (Economic Value Added). This concept, which comes from the Residual Income proposed a hundred years earlier, was introduced by many organizations from the middle of the 90s. (Stewart, 1991).

With the turn of the century came the Enron scandal which happened shortly after the burst of the internet bubble (year 2000) and it was followed by other accounting scandals (WorldCom, Global Crossing, Tyco, Xerox, Parmalat...). Shortly afterwards on an international level some important reforms in accounting regulations were introduced with the adoption of International Financial Reporting Standards (IFRS) in many countries, apart from large scale changes in auditing regulations and other areas which affected trading legislation such as the Sarbanes-Oxley Act in the USA (AICPA, 2012).

In 2004, the European Union adopted the IFRS for the consolidated accounts of listed companies. In those years there were significant efforts made by regulators as well as companies and accounts users.

To avoid a drop in economic activity an expansive monetary policy was set up with lots of loans and low interest rates. This together with the excessive emphasis on short term incentive systems led to a property and financial bubble which burst in 2008, and a sovereign debt some years later which is shaking the pillars of the market economy system. Some new scandals came to the fore (Lehman & Brothers, Madoff...) which brought about the need for new reforms of companies' control mechanisms and of the information disclosed.

This increase in uncertainty also led to transformations in accounting. Companies speed up the administrative processes to gather information sooner as the period-end (Fast close) and the strict annual budgets are substituted for forecasts which are updated throughout the year (Rolling forecast).

And so we reach the present day, with the eruption of a Fourth Industrial Revolution. Diverse new technologies (internet, social networks, Big Data, digital impression, robotics...) revolutionize the business models in most sectors. The mass production of data makes it a priority for management information to improve in decision making which involves prioritizing the synthesis of relevant data and

the speed of reporting. Reporting to Senior Management has become one of the priorities of the accounts and financial departments.

	Significant events and transformations	Impact on financial information	Impact on management control
End of XVIII century	First Industrial Revolution (steam engine, spinning, knitting machines...): mechanization of industry, agriculture, transport and communications. Large corporations emerge with a distinction between ownership and management	External audit undergoes significant momentum	Emphasis on production control. Calculation of costs: Direct costing
Mid XIX century	Second Industrial Revolution (oil, internal combustion engine, wireless telegraph...)		Perfecting of systems for calculation of costs based on Direct Costing.
Beginning of XX century	Ford begins production of the model Ford T Scientific Management		Major advances in production control Control of time and movements. Work planning Perfecting of costing based on direct, fixed and variable costs. Cost absorption system Standard cost system is developed.
1929	New York Stock Exchange crash and later financial scandals	Listed companies are required to have external auditing. Obligation to externally disclose the financial information of listed companies External auditing techniques are perfected	
1945	Economic recovery following the Second World War Third Industrial Revolution (mechanization, microelectronic...) In Japan Toyota introduces Just in Time, kanban and other modern production techniques More financial scandals	Successive financial scandals lead to the improvement of the external audit	Cost absorption system develops towards that of uniform sections. Financial control: budgets and deviations
1961	Ischikawa introduces quality circles in Japan Sam Walton opens the first Wal-Mart store in Arkansas, revolutionising trade and leading to a significant drop in prices and increase in service		Financial bonuses Tableau de bord (balanced scorecard)
1980	Progressive disappearance of tariff barriers which leads to globalization and increased outsourcing The Japanese Total Quality		Companies start to use transfer costs, ABC (Activities Based Costing) Target costing Quality costs

	technique expands across the US and Europe		
1991	Intangible assets and a value-added strategy gain importance Jeff Bezzos founds Amazon and revolutionises commerce through the internet		EVA Balanced scorecard Qualitative control
2000	Dotcom bubble Enron, Woldcom, Xerox, Parmalat cases... Expansive monetary policy	Sarbanes-Oxley Act in United States Transparency Directive of the European Union Progressive global implementation of IFRS Improvements of regulation in corporate governance New PGC en España	
2008	Property bubble Scandals Lehman Brothers, Madoff... Global financial crisis which leads to an increase in uncertainty and debate on business values and the role of ethics	Improvements in regulation to improve corporate governance Reinforcement of ethical codes in organizations	Rolling forecast. Fast close
Present day	Fourth Industrial Revolution		Everything is under question (business objectives, incentive systems...) Reporting becomes a key function so as to rapidly get the most out of the massive generation of data

Figure 2. Main stages which explain the evolution of accounting since the first Industrial Revolution up to the present day

Bodegas Torres, a passion for wine

In 2018, the wine producer Bodegas Torres, was chosen *The World's Most Admired Wine Brands* for the third time by professionals in the sector in the ranking which is published by Drinks International. It is the only European wine producer which has topped these rankings. In the eight years it has been published up to now Torres has been at the head of the European wine producers and between first and second position in the world. For Miguel Torres Maczassek, Managing Director of Bodegas Torres:

“This is a recognition which makes us feel very proud, given that we have achieved it thanks to the work and effort of all our collaborators and distributors and to the vision which we have shared over five generations in this family showing commitment from the earth to the table and maintaining our status as a family wine producer for almost 150 years”.

This is a tremendous acknowledgement for a company founded in 1870 and which, with currently has more than 1,300 employees, is the leading Spanish exporter of quality wine.

Torres is an unusual wine producer due to its wide range of products and cellars. It has vineyards in various Catalan appellations of origin and also in other areas of Spain with 2,000 hectares. Internationally, it has wine cellars in Chile (400 hectares) and California (30 hectares).

Figure 3 shows the evolution of sales and profits for recent years.

	1990	1995	2000	2005	2010	2015	2017	2018
Turnover (millions of euros)	19,7	55,8	125,8	176,2	205,9	263	266	258
Net profit (millions of euros)	2,46	10,7	22,6	14,5	10,1	6,7	11,8	6,0

Number of employees	300	479	709	1.146	1.248	1.344	1.350	1348
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Figure 3. Evolution of turnover and consolidated profits of the Bodegas Torres Group (in millions of euros)

Some of the factors that explain the trajectory of the group are explained in what follows (Amat and Anzizu, 1996). To understand the DNA of Bodegas Torres we recall their mission statement (with some keywords in bold):

*We are a team of people committed to a common goal: “From the earth to the table, we want to create **extraordinary wines and spirits**, with the aspiration of fostering memorable experiences in all the corners of the world”.*

*As a **family business**, we pass down values of excellence from generation to generation, and we firmly believe in **social, environmental and financial sustainability**, bringing together our inherited tradition and constant **innovation to lead the future**.*

Among the main crucial factors for success we highlight the following:

- **Family business.** The capital belongs 100% to the Torres family, which guarantees its independence. The main shareholder is Miguel Agustín Torres, current President and a member of the family’s fifth generation. His brother Juan Maria is responsible for institutional relations and exports. Miguel, the President’s son and a sixth generation family member, has been Managing Director of Bodegas Torres since September 2012, and as Chief Executive Officer of Miguel Torres Chile between 2009-2012 he defined the future strategy of the winery by betting for sustainability, organic viticulture and high-end wines. Another of the President’s children, Mireia, is R+D+I Manager. The President’s sister, Marimar, is the president of Marimar Torres in California. Waltraud, the President’s wife, is in charge of the German market and also collaborates in matters of design.
- **Innovation.** An innovative vocation has allowed this group to quickly adapt to changes in its environment and stay ahead of its competitors by giving itself competitive advantages in products and processes. For example, in 1928 it was very innovative in distilling wines and creating vintage brandies. In 1966 it was pioneering in modern viticulture and oenology. They began to grow vine varieties from abroad, such as *cabernet sauvignon* and *chardonnay*. In 1970, it was pioneering again, this time by introducing a new technique for fermenting white wines at controlled temperatures. In 1980, it improved techniques for the processes of fermenting and ageing in the production of red wine. It regularly collaborates in research projects with university departments. An example is the non-alcoholic wine Natureo. In 2005 it received the Wine Personality Prize for innovation, from the US magazine Wine International. In 2017 it received the SIL Prize alongside Amazon and SEAT, which recognises companies with the greatest logistical efficiency and technological innovation.
- **Excellence.** A passion for wine permeates the value of excellence in all activities. This has been one of the first wine producers to take on board the leading quality control systems (ISO 9001, for example).
- **Brand Policy.** From its beginnings this group has constantly invested in its brands. For example, in 1940, it was the first wine producer of the Penedés to sell bottled wine at a time when it was sold by cask. It has its own commercial network which allows it to reach any customer in Spain without intermediaries. According to the annual report published by the independent British consultancy Intangible Business, “*The Power 100: The world’s most powerful spirits & wine brands 2009*”, Torres has the strongest brand of any European still wine producer.
- **International vocation.** The group’s first activity was, in fact, exports, when Jaime Torres, who worked in a grocery store in Cuba, would sell wine and other typical produce of Catalonia which his brother Miguel sent him from the port of Barcelona. In 1939, at the end of the Civil War, the Bodegas Torres facilities were destroyed as a result of bombing. In 1940, after the end of the Civil War, they had to start over, and in 1959 exports began once more. Currently the group has a presence in more than 150 countries. In the Chinese branch, for example, there are more than two-hundred employees. It is common to find their wines in major airports the world over.
- **Design and communication of the culture around wine.** The Group has always been very innovative in this area. Years ago it created Club Torres which offers courses, wine tastings, and

exhibitions. The Torres Wine Bars are a unique culinary and oenological enterprise to promote the culture around wine. They can be found in Barcelona, Santiago de Chile, Shanghai, and Bahrain.

- **Environmental preservation.** Another differentiating point is the strategic priority of environmental matters. In 2009 the group received recognition as number 1 Winery on the Green List of the British magazine *Drinks Business* for its contribution and commitment to preserving the environment. And in 2010 it received the prize for *Green Company of the year* for its environmental commitments. In 2013 it launched Habitat, an organic wine. In 2015 the British magazine *Drinks Business* prized Torres for its use of renewable energy.
- **Self-financing.** High capitalisation is a result of self-financing and a cautious financial policy as its own funds are always close to 60% of the total balance.

The main challenges for the future are to continue being a leading business. In order to do this, the group must ensure the transition to the sixth generation of the family and the continuity of the pillars that Torres has always favoured: family character, innovation, excellence, brand policy, internationalisation, promoting wine culture, self-financing, wellbeing of *stakeholders* (people, environment...).

Evolution of accounting practices in Bodegas Torres

For the first century of the company's existence, its accounting practices were simple, in line with the low standards required by the legal, accounting and tax framework. As businesses did not pay a tax on profits, it was not compulsory to make precise evaluations of inventory or other costs. It must also be taken into account that, as can be seen in figure 3, the winery was small until the seventies.

In those years no formalised techniques of management control were used, but some one-off non-accounting cost calculations were made, essentially to fix sale prices. These calculations only took into consideration direct costs, such as raw materials, containers, bottle tops and capsules, labels, production labour, and commissions for salespeople. To set sales costs, they added a rate of indirect costs and a margin percentage to the variable costs. The indirect cost rate was determined from the proportion between direct and indirect costs, but there was no analysis of the make-up of the indirect costs.

This situation changed radically as a result of outside changes.

End of Autarchy and opening up of Spain to the outside world

In 1959 General Franco's dictatorship started to open up its borders to the outside world. Businesses like Bodegas Torres, with a great vocation for exports, took advantage of these circumstances.

Change in the Spanish political regime and impact on accounting

Between 1973 and 1975 the transition from a dictatorship to a new democratic regime took place. As a consequence, important changes were made to management, commerce, accounting and tax regulation. In 1973 the first General Accounting Plan (Spanish GAAP) was approved in Spain. Businesses were obliged to pay tax on profits for the first time. This forced businesses to calculate and divulge their profit-and-loss account. For this they had to calculate the cost of sales and the value of their inventory. This regulatory change forced businesses to perfect calculations on the costs of products and the company opted for a Direct Costing system that constantly reported on the direct costs of products.

Entry into the European Communities

Spain's entry into the European Communities in 1986 involved a radical change in the competitive landscape. Spanish businesses could access the European market more easily, but international competition also arrived in Spain with strength. This was a shock for management practices in general, and for management accounting in particular. The increase in competition meant that a new costing system was needed, which gave complete information regarding total costs for each department and product. For this reason the business deployed a full costing system by sections. This system improved costing information by incorporating the industrial costs of different sections (press, filtering, ageing, bottling...).

Soon after, the business began to use a technique of budget control, measuring monthly deviations.

Globalisation gains ground

At a global level, most industries began to notice the disruptive changes of globalisation. The nineties coincided with large-scale international expansion for Bodegas Torres, which opened branches in various countries, such as China, for example, and competition became evermore complex. Margins were stretched and management tools had to be improved. The need to be more competitive motivated a costing system based on activities. In fact, it was one of the first Spanish companies to adopt the ABC

(Activity Based Costing) system, which demonstrates that the innovative attitude of Torres manifests itself, not only in oenological matters, but also in management practices (Amat and Blake, 1995). In figure 4 one can see how costing calculations have improved at Bodegas Torres from 1975 to the present. They moved from partial costing to a complete costing calculation.

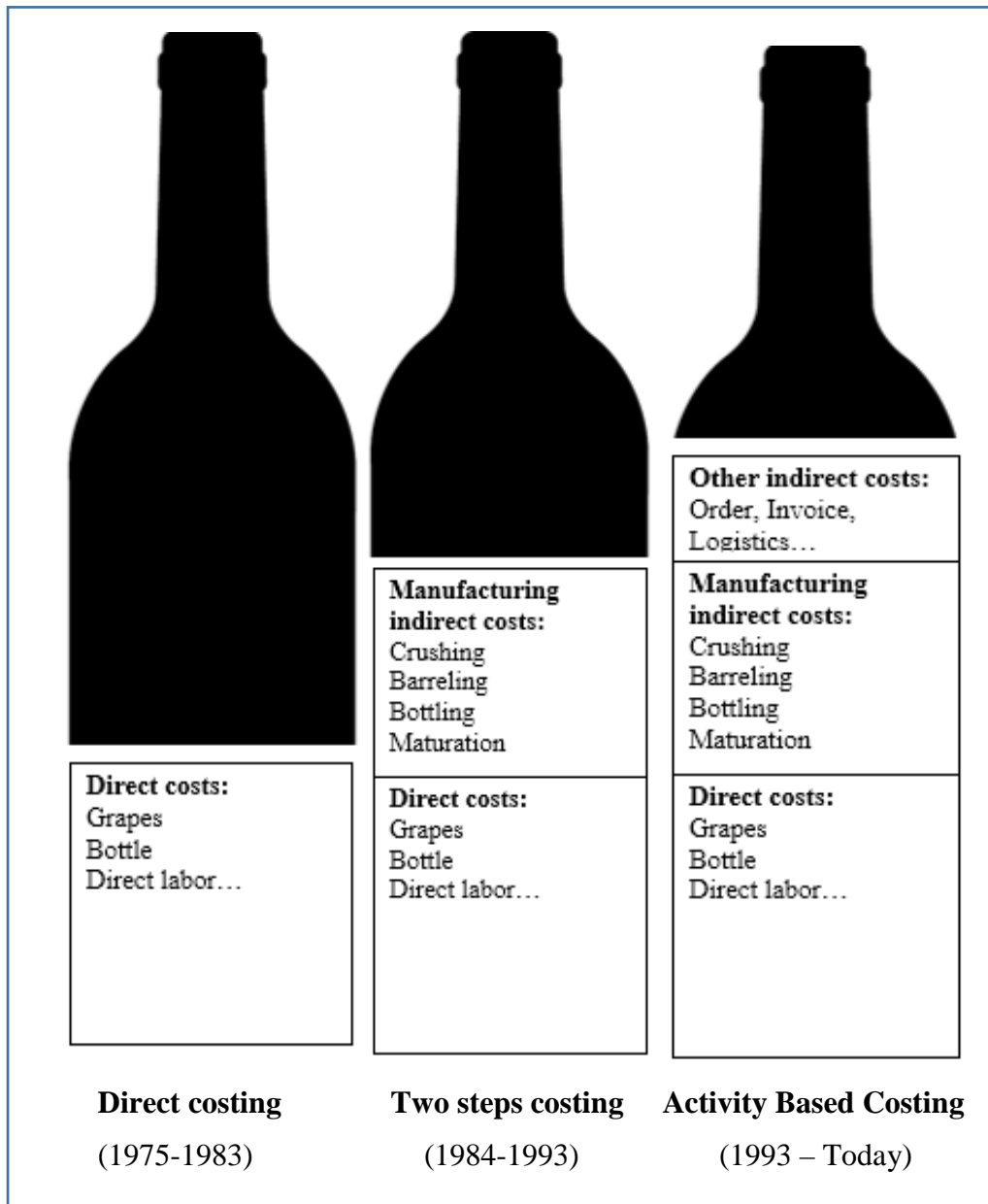


Figure 4. Evolution of costing systems at Bodegas Torres

Towards the ends of the nineties a system of indicators with a balanced scorecard was deployed. All these management accounting systems were reinforced with an integrated computerised management system which began operation in full at the start of the year 2000. The business began to count on powerful management tools such as profit centres.

Widespread financial accounting reform in Europe

In those years important changes were made to European financial accounting. The General Accounting Plan (Spanish GAAP) of 1973 was replaced with a new General Accounting Plan in 1990, to adapt accountancy to European Directives. Also the Spanish Accounting and Audit regulator began approving adaptations for those sectors of the economy that had relevant peculiarities. Torres was an active player in

this legal reform and promoted studies that decisively influenced the new special regulation for winegrowing businesses (Amat et al, 1998; Blake et al, 1998). This is a theme that has also been studied at an international level (Couto and Lima, 2007). In 2001, the ability to consider certain long-term inventory items such as brandies, one of Torres' main products, as fixed assets, was granted for the first time in Spain (Spanish Accounting Standards Board, 2001).

Accounting at Torres was advancing towards a consolidated vision of the business due to the growing number of companies in the group. On the other hand, a fast-close accounts system was implemented internally, which helped improve accounting processes.

From the crisis in 2000 onwards, in the business there was an increased sensitivity towards efficient asset utilisation. As a consequence, there soon followed the deployment of an EVA technique to promote an increase in value added.

In the years of economic expansion (2001-2007), the company decided to successfully deploy an integrated ERP (enterprise resource planning) which increased the reliability of accounting information and allowed for new improvements in productivity.

In 2008, the global financial crisis caused a significant drop in international economic activity which had a strong impact in Spain, and affected the sales and profits of Bodegas Torres. In response, the company put in motion some important initiatives to improve efficiency and reduce costs. The contingency plans, which were led by the company's management control, solid finances, and its position as a top level exporter enabled the company to get through the toughest times without restructuring the workforce. The majority of its competitors evolved more negatively. During the crisis, the costing system evolved from ABC to a Target Costing system.

From 2016 onwards, Management Control's vision evolved towards Business Control to support continuous decision-making with the goal of increasing margins. Accountancy itself was focused on improving reporting by taking advantage of ERP and new technologies. The implementation of Fast Close just goes to show the relevance of speed and nowadays provides accounts for a whole month five days after the close.

The main achievements in the evolution of financial accountancy of Bodegas Torres are summarised in figure 5. It may be noted that the large-scale changes are a consequence of political changes (end of the Dictatorship in Spain between 1973-1975 and its entry into the European Community in 1986) and the financial and accounting scandals of the year 2000, which triggered the adoption of the IFRS in Europe.

	Event	Changes in the regulation of financial accounting in Spain	Changes in financial accounting in Bodegas Torres
Mid XIX Century	Second Industrial Revolution		
Beginning XX Century	Ford T Scientific Organization		
1929	Wall Street Crash and financial scandals		
1950	End of World War Two Third Industrial Revolution Just in Time and Kanban More financial scandals		
1962	Wal-Mart opening		
1973-75	End of the dictatorship in Spain	First Spanish GAAP	Adoption of First Spanish GAAP
1980	Globalization and outsourcing Total Quality adoption in USA and Europe	Auditing Law	First computer in the company
1986	Spain enters the European Union Big increase in the market competition		
1991	Amazon is created	Adoption of UE Accounting Directives New Spanish GAAP adapted to UE Directives	Adoption of New Spanish GAAP
1995			First accounts audited
2000	Dotcom bubble More accounting scandals		
2001		GAAP for winemaking companies	Adoption of GAAP for winemaking companies
2003			First consolidated accounts Fast close 7 days
2005		Adoption of IFRS in UE	
2008	World financial crisis More accounting scandals More uncertainty and debate about values and ethics	New Spanish GAAP adapted to IFRS	Adoption of New Spanish GAAP Automatic consolidation
Now	Fourth Industrial Revolution		Fast Close makes it possible to have the data from the previous month just 5 days after the end of the month

Figure 5. Main achievements of Bodegas Torres in financial information

In figure 6, the main achievements of Bodegas Torres in management accounting practices, are summarised. The table shows that in the last few decades the business has considerably reduced the time elapsed between the invention of a new accounting practice and its adoption. For example, full costing and budgets were adopted over thirty years after they appeared. On the other hand, more recent techniques such as ABC, BSC, EVA, and Rolling Forecast were implemented just a few years after they were first proposed. This increased speed for adopting new accounting practices may be related to an increase in the level of competitiveness that accompanied the growth and internationalisation of the company.

	Event	Adoption of new management accounting practices in the world	Adoption of new accounting management practices in Bodegas Torres
Mid XIX Century	Second Industrial Revolution	Direct Costing	
Beginning XX Century	Ford T Scientific Organization	Standard Costing	
1929	Wall Street Crash and financial scandals		
1950	End of World War Two Third Industrial Revolution Just in Time and Kanban More financial scandals	Full Costing Budgets	
1962	Wal-Mart opening	Bonuses Tableau de Bord	
1973	End of the Dictatorship in Spain		
1974			
1975			Direct Costing for Tax purposes
1980	Globalization and outsourcing Total Quality adoption in USA and Europe	Target costing Quality costs	First computer in the company
1986	Spain enters the European Union Big increase in the market competition		Cost centers Full costing. Two steps costing system
1988		ABC	Budgets
1991	Amazon is created	EVA	Mission statement
1993			ABC
1994		BSC	
1995			First accounts audited Creation of the Department of Internal Audit Bonus system for managers
1998			Total Quality Management
1999			First long term plan BSC
2000	Dotcom Bubble More accounting scandals		Integrated Management Information Systems
2002			Profit centers
2003			Fast close
2004			EVA Centralized cash management
2006			ERP SAP
2007			Transfer pricing between subsidiaries in the group
2008	World financial crisis More accounting scandals More uncertainty and debate about values and ethics	Rolling forecast	Cost reduction initiatives
2009			Budgets using Target costing
2011			Environmental measures
2016			Budget automatization
2018			Rolling forecast
Now	Fourth Industrial Revolution		Reporting is one of the key priorities of the Accounting and Finance Department

Figure 6. Main achievements of Bodegas Torres in accounting practices

Conclusions

This article shows that the evolution of financial information and management control practices is the result of various types of phenomenon. On one hand, financial information has been perfected alongside regulatory changes, which are themselves the consequence of public concern triggered by economic recessions and big scandals. As the requirements of accounting regulation have increased, financial information has improved (disclosure of financial information, account audits, account consolidation...). In the case of Spain, the large-scale changes in financial information coincided with the end of the Dictatorship between 1973-1975, its entry to the European Union in 1986 and widespread commercial and accounting reform triggered by the accounting scandals in the year 2000.

On the other hand, management control practices have been perfected alongside the evolution of a need for information in decision-making, which in turn is the consequence of increased competitiveness and of the new possibilities offered by information technology.

The experience of Bodegas Torres also puts into sharp relief that we are talking about a company that has maintained considerable success through time, is marketing-oriented and has based itself on excellence, innovation, internationalisation, and sustainability. On the side of innovation it must be noted that it was key not only in R+D, operations, and marketing, but also for financial information and management control practices. In fact it was one of the first wineries to use techniques such as ABC, or the Balanced Scorecard. In this field, Bodegas Torres has been very innovative and has been one step ahead whenever the environment changed.

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