Big is better for shared value creation: AYALA group model "professional approach"

Dr: kherchi ishak¹

The Faculty of Economic, Commerce and Management Science University of Hassiba Benbouali, Chlef, Algeria

Abstract:

Purpose:

This paper demonstrate why big is better for shared value creation, we provide Ayala group model to create shared value using professional approach, in addition to that we aims to provide a theoretical and practical contributions that ground understanding the concept of creating shared value.

Design/methodology/approach:

The authors analyze a single case study of AYALA international group. The objective is to show why a big corporation is better in creating shared value.

Findings:

We found that the big corporation is better for shared value creation, big corporations characterizes is critical factors; Process innovation, advanced technology, Economies of scale power of big size and strong marketing. Ayala group used all of these factors and followed a set of programs in 11 subsidiaries, yield to a shared value creation for the Group and society.

Research limitations/implications:

This single case study provides model to create shared value in big corporation; however, more research is needed to find critical factors to create shared value in medium and Small corporation.

Practical implications:

The paper has practical implications that relate to the design of shared value model. We provide practical model and ideas that could be applied by big corporations to reach shared value creation.

Originality/value:

A unique view of shared value creation in big corporation.

Kev words:

Creating shared value, Ayala group, social value, environment value, business value, international groups.

Classification JEL: L25, Q 56

ملخص:

هدف الدراسة:

كانت هذه الدراسة تهدف الى ابراز أهمية كبر حجم المؤسسات في عملية خلق القيمة المشتركة ، قمنا بتقديم المقاربة المهنية و العملية للمجمع AYALA ، بالإضافة الى ذلك هدفت الدراسة الى المساهمة في اثراء الجانب النظري و العملي لمفهوم خلق القيمة المشتركة.

المنمحية:

اعتمد الباحث على تحليل دراسة حالة منفردة للمجمعAYALA ، حيث قمنا بجمع المعلومات من خلال الموقع الالكتروني للمجمع ، الإضافة الى وثائق متحصل عليها من طرف ادارة المجمع .

نتائح الداسة:

توصلنا الى أن كبر حجم المجمع ساهم بشكل كبير في خلق القيمة المشتركة بالنظر الى الخصائص التي يتمتع بها كمستوى الابداعات التي يقدمها المجمع ، حيازة التكنولوجيا الناشئة ، اقتصاديات الحجم ، قوة الحجم الكبير و قوة التسويق استفاد المجمع من هذه الخصائص و المتواجدة على مستوى 11 فرع تابع له و تمكن من خلق القيمة الاقتصادية للمجمع و القيمة الاجتماعية للمجتمع .

-

¹ eMail: k.ishak@univhb-chlef.dz

حدود الدراسة:

اختصرت هذه الدراسة على المجمعات الكبيرة لا براز أثر الحجم الكبير في خلق القيمة المشتركة ، يمكن للبحوث الأخرى أن تتطرق الى سيرورة خلق القيمة المشتركة لدى المؤسسات الصغيرة و المتوسطة.

التطبيق العملي للدراسة:

تتضمن الدراسة تطبيقات عملية يمكن اتباعها من قبل المجمعات الكبيرة لخلق القيمة المشتركة.

صالة البحث:

تضمنت الدراسة مقاربة مهنية عملية فريدة لخلق القيمة المشتركة على مستوى المجمعات الكبرى.

الكلمات المفتاحية:

خلق القيمة المشتركة ، مجمع AYALA ، القيمة الاجتماعية ، القيمة البيئية ، القيمة الاقتصادية ، المجمعات العالمية

التصنيف: L25, Q 56

Introduction:

Philippines faces many challenges; Poverty, climate change, high food prices, inflation. These challenges prevent the country from reaching its economic potential and making better standard of living across the country.

These social and environmental challenges need a role for business to invest in the communities within which they operate. The biggest conglomerate in Philippines Ayala Group which has a long-standing presence across diverse industries with different subsidiaries and affiliates did some initiative reaffirmed its primed position to help address some of the country's pressing development challenges. Ayala has invested in many industries in real estate, banking, telecommunications, water electronics manufacturing, and automotive to provide better standard of living for Filipinos.

In addition to that, Ayala continue to pursue new directions in industries aligned with the broader development goals of the country: deepening presence in power and transport infrastructure, as well as the entry into education and healthcare.

Moreover, ayala group believe that addressing these social and environmental problems yields to an economic value for the group and social benefit for the society which lead to shared value creation. To do that Ayala need to make some change and development on portfolio activities in order to provide products and service which create value for society and lead Ayala to a competitive business.

The fundamental problem of this study is related to the process and the way Ayala group creates business value and social value, using its subsidiaries and affiliates, so the question is: How Ayala group creates shared value? And how much big is better for shared value creation?

1. Shared value definitions:

Creating Shared Value is an ability of company to linking between value creating of societies and companies' economic value through various strategic, the fundamental ideas to expand both of enterprise and society, which can help create the new opportunity which enhanced competitive advantage and corporate sustainabilityⁱ.

Shared value creation also means simply, everybody wins- society will benefit from the innovation business can bring to bear, and businesses will be more productive and more efficient and over time will create greater markets for their goods. ii

According to Porter .M.E & Kramer.M ;Shared value can be defined as policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operatesⁱⁱⁱ.

In addition to that, creating shared value entails embedding a social mission in the corporate culture and channeling resources to the development of innovations that can help solve social problems^{iv}.

Moreover, The idea of creating shared value differs from corporate social responsibility in that it seeks to anchor pro- social and pro-environmental corporate be- haviour within markets and value propositions, rather than within an 'add-on' narrative of corporate duties and responsibilities."

The basic idea of shared value is that there are many opportunities in meeting these societal needs to actually create economic value in the process. Shared value is where you do both.

2. How shared value is created:

Companies can create economic value by creating societal value; there are three distinct ways to do this: by reconceiving products and markets, redefining productivity in the value chain and building supportive industry clusters at the company's locations. Each of these is part of the virtuous circle of shared value; improving value in one area gives rise to opportunities in the others.

2.1. Big Corporation and reconceiving products and markets:

Which means to develop 'innovative products and services that better serve existing markets or allow access to new ones, this requires the identification of societal needs, benefits and harms that might be incorporated in the organizations products and services^{vi}.

Social-oriented product development is defined as the organizational concentrate of research and development new product and service which focused on customer health that can resolve a problem include low costs and low prices of products. In term of social product development has emphasized to gain customer trust, loyalty lead to business success. The new ideas to competitive advantage products development such as organic products and ecoproducts^{vii}.

Big size corporation have resources to follow research & development on products and this could easily lead to produce innovation products that meets social and environmental needs. In addition to that Big size Corporation is high Productive with lower price for the poor people according to the fact of Economies of scale.

2.2. Big size corporation and redefining productivity in the value chain:

Redefining productivity in the value chain requires refers to organization ability to create new operation and technology including reconfiguring value chain activities to drive resource and labor productivity lead to benefits society, Portor and Karmar reveals of new thinking is far greater than traditionally of congruence societal progress and productivity in value chain that invents several new ways can often be achieved with better technology such as energy use and logistics, resource use, procurement, distribution, employee productivity, and location that all illustrate reimagining from the perspective of share value viii.

Which requires organisations to' improve the quality, quantity, cost, and reliability of inputs, production processes, and distribution systems, while simultaneously acting as a steward for essential natural resources and driving economic and social development', Opportunities to create shared value arise from taking responsibility for the way that an organization's value chain is affected by, and affects, many societal issues (natural resources, health and safety, working conditions, etc), rather than seeing these as externalities^{ix}.

Big size Corporation have ability to transfer technology to solve social problems, Strong marketing to reach poor people superiority. In addition to that big size corporation can redefine the productivity in the value chain for cost saving by reduced electricity reduced direct CO2 emissions, reduce the quantity of water waste, increase reuse material recycling and energy recovery. cost saving may occur through Improving energy, water and resource efficiency across the value chain, Minimizing logistical intensity, Improving employee health and safety, Enhancing the productivity and wages of lower income employees, Recruiting that represents the diversity of customers and the communities where a company operates.

2.3. Big size Corporation and enabling the development of local clusters:

This means that organizations need to compete and thrive by acknowledging that they do not operate in isolation. They need to invest in 'a strong competitive context that includes reliable local suppliers, functioning infrastructure of roads, and telecommunications, access to talent, and an effective and predictable legal and regulatory framework, among other factors, organizations create shared value by building clusters to improve productivity while addressing gaps or failures in the framework conditions surrounding the cluster; the most successful cluster development programs result from collaboration with the private sector, associations, government agencies and NGOs^x.

Big size corporations are well known in markets by stakeholders and other organizations, its able to affect the political process through lobbying, this could help to build strong relation with most effective parties that effect corporation and society

We see that reconceiving Products and Markets allows to develop products regard to society's needs and this what rise the demand on these products, in the same time redefining productivity in the value chain allows to save energy, water waste, cost and create value for both society and business, then, enabling local cluster development which help to provide infrastructure around creating shared value.

3. Implication requirement:

Although adopting a CSV approach will be different for each organization, Bocksette & Stamp identify three common lessons: x^i

First: organizations should work from inside to outside and from top to bottom. Shared value is about the strategic direction of the organizations; first of all, a clear vision should be identified, followed by work to build this into the corporate DNA. Achieving this requires the total engagement of the top management: if they are not on board, the process is likely to fail.

Second: it takes time to adopt a CSV approach. Large doses of patience and tenacity are necessary to integrate the concept into the whole organization and its operations tracking results is essential to identify and show progress, and this takes a long time since CSV necessitates identifying the impact of social investments. In order to avoid discouragement, it is beneficial to communicate early successes as soon as possible. It is also essential to build a robust framework to track progress and to regularly update the strategy.

Third: the process requires change managers. CSV implies a change of paradigm. Under the CSR model, managers were focused on external relations, whereas under the CSV model, managers need to be focused on change management, so they need to be strongly linked to the top and have real authority to act.

4. Creating social value and business value at the three levels of shared value:

Creating shared value from reconceiving products and markets focuses on revenue growth market share, and profitability that arise from the environmental, social, or economic development benefits delivered by a company's products and services^{xii}.

Creating shared value from redefining productivity in the value chain focuses on improvements in internal operations that improve cost, input access, quality, and productivity achieved through environmental improvements, better resource utilization, investment in employees, supplier capability, and other areas^{xiii}.

Creating shared value from enabling local cluster development derives from improving the external environment for the company through community investments and strengthening local suppliers, local institutions, and local infrastructure in ways that also enhance business productivity as shown in see Table 1.

Table 1: Three levels of Shared Value

LEVELS OF SHARED VALUE	BUSINESS RESULTS	SOCIAL RESULTS
Reconceiving product and markets: How targeting unmet needs drives incremental revenue and profits	Increased revenue Increased market share Increased market growth Improved profitability	Improved patient care Reduced carbon footprint Improved nutrition Improved education
Redefining productivity in the value chain: How better management of internal operations increases productivity and reduces risks	Improved productivity Reduced logistical and operating costs Secured supply Improved quality Improved profitability	Reduced energy use Reduced water use Reduced raw materials Improved job skills Improved employee incomes
Enabling cluster development: How changing societal conditions outside the company unleashes new growth and productivity gains	Reduced costs Secured supply Improved distribution infrastructure Improved workforce access Improved profitability	Improved education Increased job creation Improved health Improved incomes

Porter et al Measuring Shared Value How to Unlock Value by Linking Social and Business results, FSG-USA, 2013, P3.

We see that each level of shared value contribute in the creation of business and social value targeting unmet needs drives incremental revenue and creat social value, a better management of internal operations increases productivity and reduces risks and save water and energy that the society need. In addition to that changing societal conditions outside the company unleashes new growth and productivity gains.

5. Why big is better for shared value creation?:

Big corporations and international groups are better for shared value creation for several reasons:

1- Process innovation for reconceiving product and market

In the study of DESMET.K, PARENTE.S.L, they mentioned that both "Atack, J.,F.bateman and S.Margo" find that larger firms were more likely to use steam power in the 19th century. In terms of R&D expenditures, "Cohen and Klepper" find that they rise with firm size, with a greater share being allocated to process innovation^{xiv}.

Big size Corporation facilitates process innovation. The idea that firm size facilitates process innovation has a long history in economics, going back as far as Schumpeter. There is much empirical evidence supporting this view.

The use of advanced technology is another factor characterized large companies, this factor also help to reconceive product and market. Advanced technology help to provide products with low cost to solve social problems and bring such an innovative product to address social needs, as we see in figure 1.

Creating shared Big size corporation value **Process innovation** Reconceiving products and Advanced markets technology Redefining Economies of scale productivity in the (Productive Corporation) value chain Power of big size **Enabling local** Strong marketing cluster development

Figure 1- shared value model for large companies

Source, Authors (2017).

2- Economies of scale to redefine the productivity in the value chain:

According to Gilbert. J, Henske. P, and Singh. Scale helps companies to diversify the risk of uncertain investments in discovery and development. In addition, large global commercial operations can boost a company's power to launch new products and expand its in-licensing capacity. Companies also expected that scale would help them exploit next generation technologies^{xv}.

We see that big corporations are old companies, they can use learning curve effect to achieve economies of scale, learning curve effect also allow large companies to reduced electricity, reduced direct CO2 emissions, reduce the quantity of water waste, increase reuse material recycling and energy recovery.

Moreover, The main source of economies of scale is the learning curve effect, this what leads to cost saving through Improving energy, water and resource efficiency across the value chain, Minimizing logistical intensity, Improving employee health and safety, Enhancing the productivity and wages of lower income employees, Recruiting that represents the diversity of customers and the communities where a company operates.

2- Power of big size and strong marketing enables local clusters development:

"Serafeim" focused on Power of big size and strong marketing; Corporate power is a function of size for several reasons; first, larger companies are able to affect the political

process through lobbying. Second, larger companies are able to shape consumer preferences through spending large amounts of money on advertising. Third, larger companies are able to exercise more power over employees and establish new labor practices, especially in areas with high unemployment and as a result few outside options for employees xvi.

More generally, large corporations have been shown to shape culture and society by establishing hierarchies and as a result imposing a power structure in society. The hypothesis that size is associated with power is consistent with larger companies having higher profitability margins, such as return-on-equity, experiencing slower mean reversion in profitability, and increasing more their profitability margins by the development of the financial system xvii.

It is large organization which has international name and fame. It has good network world wide for distribution of goods specially for poor people in rural areas xviii.

Using the power of big size and strong marketing, big corporations should work with government, non-government organizations, social organizations, development agencies and every effective part in its own business, the main purpose here is to have a collective impact which help really well in creating shared value.

AYALA international group model

1- Who is Ayala:

Ayala Corporation is the holding company of one of the oldest and largest business groups in the Philippines. It maintains a tradition of excellence, and integrity has run continuously through seven generations, adhering to the principles and ideals that had brought it to existence more than 180 years ago^{xix}.

Ayala has a leadership positions in real estate, financial services, telecommunications, water infrastructure, electronics manufacturing, automotive distributorship and dealership, and business process outsourcing, and new investments in power generation, transport infrastructure, and education^{xx}.

2- Ayala different subsidiaries and affiliates:

Ayala is the biggest conglomerate in Philippine with 11 subsidiaries and affiliates as follows:^{xxi}

- 1- Ayala land, INC. (PSE: ALI) is the leading developer of large scale, mixed use, and integrated estates in the Philippines.
- 2- Bank of the philippine islands (PSE:BPI), founded in 1851, is an acknowledged leader in Philippine banking.
- 3- Telecom globe (PSE:GLO), formed out of a partnership between Ayala and SingTel, is a major provider of telecommunications services that operates one of the largest and most technologically advanced mobile, fixed line, and broadband networks in the country.
- 4-Manila water company INC.(PSE:MWC) is the sole provider of water and used water services in Metro Manila's East Zone and has existing operations in Boracay, Clark Freeport Zone, Cebu, and Laguna in the Philippines, and Ho Chi Minh City in Vietnam.
- 5-Integrated micro-electronics, INC. (PSE:IMI) is a leading provider of electronics manufacturing services and power semiconductor assembly and test services in the region.
- 6-Ac energy holdings, INC. continues to build a diversified portfolio of conventional and renewable power generation assets through acquisitions and development of greenfield projects.

7-Ac infrastructure holdings corporation selectively pursues toll road, rail and airport projects under government's public-private partnership program.

8-liveit investment LTD. invests in innovative BPO companies that can leverage the Philippines and have the potential to become global leaders in their sectors.

9-Ayala education, INC. is the holding company for Ayala's investments in the education sector. It is focused on delivering high quality, affordable education that can significantly enhance the employability of its graduates.

10-Ayala automative holding corporation is Ayala's holding company for automotive investments. It is the leading vehicle dealership network of both Honda and Isuzu brands and has the distributorship and dealership network of Volkswagen passenger cars in the country.

11-AG holding limited is the holding company for the Ayala group's international property investments in Asia and the United States.

3- How Ayala created shared value:

According to Porter .M.E & Kramer.M, any corporation needs 3 steps to create shared value; reconceiving products and markets, redefining productivity in the value chain, enabling local cluster development. ayala follow these three steps in most of their subsidiaries for great shared value creation.

3-1- Using advanced technology to reconceive Products and Markets:

The company focused on enhancing its automotive camera platforms. It released samples of various minicube variants, which differ in the image sensor used, the lens employed, and the interface to the vehicle's control unit. These platforms offer the smallest footprint and demonstrate advanced heat dissipation features. While advancing design engineering to prevent vehicular accidents, the company's Philippine operations reached total revenues for ADAS amounting to \$33.7 million^{xxii}.

Ayala reconceived products entrepreneurship for low-income segments through globe tel providing entrepreneurial opportunities to low-income markets is a key business strategy of Globe. AMAX is Globe's electronic reloading service that allows thousands of retailers nationwide to automatically reload prepaid credits to a Globe or Touch Mobile cell phone. This is an important way for Globe to reach more prepaid customers, while sharing the economic benefits of its business to small retailers and new entrepreneurs^{xxiii}.

As of December 2014, there are approximately 917,000 AMAX retailers nationwide who now have steady income streams and are enjoying profitable returns^{xxiv}.

Ayala group Reconceiving Products and Markets by enhancing its automotive camera platforms and allows thousands of retailers nationwide to automatically reload prepaid credits to a Globe or Touch Mobile cell phone.

We see that ayala group used its own advanced technology to provide an innovative automotive camera platform. It also provide an innovative service which is AMAX, AMAX is Globe's electronic reloading service that allows thousands of retailers nationwide to automatically reload prepaid credits to a Globe or Touch Mobile cell phone.

3-2- Using learning curve effect to redefining Productivity in the value chain:

Ayala is the oldest and largest business groups in the Philippines. It maintains a tradition of excellence, and integrity has run continuously through seven generations, adhering to the principles and ideals that had brought it to existence more than 180 years ago. Using its

learning experience in business to redefine productivity in the value Chain Ayala focused on; hazardous waste generation, waste productivity, reduce water consumption and materials with recycled content.

3-2-1- Non-hazardous Waste Generation:

Ayala Land generated 5,541 tonnes of compostable in 2014. Historical data refers to waste generated in APMC-managed properties. These are continually segregated in their Materials Recovery Facilities. In addition, its subsidiary Makati Development Corporation posted savings worth 225 million \not on hauling costs by segregating x^{xxv} .

Globe Tel, meanwhile, successfully reduced its solid wastes from its corporate offices by 46 percent. This represents a 23 percent decrease in residual wastes disposed in landfills from 101 tonnes in 2013 down to 78 tonnes in 2014. In 2014, Ayala Land diverted 53 percent of its nonhazardous waste away from landfills through recycling and reuse. Globe diverted 21 percent as it focused on waste reduction. IMI diverted 98 percent xxvi.

3-2-2- Waste Productivity:

In 2014, Ayala waste productivity is 123.80 (million peso revenue per tonne), which is 53 percent lower than the benchmark 264.07 million peso revenue per tonne. This benchmark is based on the median values of companies in the same sector in Corporate Knights Capital's 2015 Global 100^{xxvii}.

3-2-3- Water Consumption:

INTEGRATED MICRO-ELECTRONICS, INC. IMI's water management program generated savings of 1.39 percent or 10,473.2 cubic meters in 2014 through the improvement of deionized water system by increasing the life cycle of phenol formaldehyde resin and decreasing regeneration frequency; and the reuse of treated water for gardening and domestic applications^{xxviii}.

3-2-4- Materials with Recycled Content

IMI recovered 471 kg of solder dross in 2014. Forty percent of these materials are considered as waste and 60 percent is being reused as raw material^{xxix}.

Ayala group redefining productivity in the value chain; Ayala Land generated tones of compostable, Globe Tel, meanwhile, successfully reduced its solid wastes from its corporate offices Ayala Land diverted most of its nonhazardous waste away from landfills through recycling and reuse. ayala reduced waste productivity an Water Consumption.

3-3- The big size of Ayala group Enable Local Cluster Development:

Ayala continue to create shared value by partnering with others; Ayala signed a contract with clark development corporation, following programs and seminars for safe driving, bridging public service gaps

3-3-1- AYALA signed a contract with Clark Development Corporation:

For creating shared value in Health and Sanitation In 2014, the company spent a total of 4.1 billion ₱ in capital expenditures in the East Zone. 72% was spent on network reliability and used water expansion, and the remaining 28 percent was spent on concession fees. In August 2014, Clark Water signed a contract with Clark Development Corporation to extend their concession agreement by another 15 years ending in 2040 xxx.

3-3-2- AYALA programs and seminars for Safe Driving:

Honda, Isuzu, and Volkswagen dealerships under Ayala carry out various customer care programs and seminars on defensive driving, traffic rules and regulations, basic car care, troubleshooting, and fuel efficiency. Globe has also partnered with businesses such as Puregold and All phones to expand its electronic loading distribution channels, making their products easily accessible by more customers^{xxxi}.

3-3-3- Bridging Public Service Gaps:

In partnership with various learning institutions, such as Polytechnic University of the Philippines Bataan, GNPower's programs include scholarships in entrepreneurship and technical skills, among other tracks. AC Energy funded the schooling of over 100 persons from various stakeholder groups in its communities^{xxxii}.

We see that the big size and strong marketing of Ayala group enabled local cluster development and improved lives through signing a contract with Clark Development Corporation, providing seminars for Safe Driving. In addition to that ayala partnership with various learning institutions to support young entrepreneurship.

4- Ayala programs and Social Value Creation:

In addition to the three main steps mentioned above, Ayala continue to make effort and initiatives for more shared value creation. Ayala group follow a set of programs in order to create value for the society, ayala group focused on Health and Well-being, Addressing Poverty, Hunger, Inequality and Inclusive Quality Education.

4-1- Health and Well-being

Ayala provide a Globe Telecom subsidiary and Health Intervention via mobile technology to address human immunodeficiency virus, ayala also encourage a healthier lifestyle among more people, Ayala Land has installed bike racks in key areas of its developments to introduce the bicycle as an alternative to cars, in addition to that Ayala group within Bank of the Philippine Islands (BPI) has developed some solutions provide financial wellness for all income levels

By saving through direct save-up and jumpstart, investing in long-term financial security, empowering more filipinos through the stock market **xxxiii*

The big size of Ayala group allowed to provide health and well-being, the Globe Telecom subsidiary provided health Intervention via mobile technology. Ayala Land has installed bike racks in key areas of its developments to introduce the bicycle as an alternative to cars, the subsidiary Bank of the Philippine Islands provide Financial Wellness for All Income Levels

4-2- Addressing Poverty, Hunger, and Inequality:

4-2-1- Bank of the Philippine islands promoting financial inclusion:

Numerous business opportunities can be found in serving low-income segments. More than 21 million or 56 percent of the total employed persons in the Philippines earn minimum wage. Directly addressing this social challenge, Bank of the Philippine islands developed Easy Saver, a deposit account which requires no maintaining balance and can be opened with only 200 ₱and a 50₱ ATM card fee. This product has seen a steady rise in its number of customers, and also in the size of their accounts. The number of accounts increased by 72 percent compared to 2012. BPI delivers this program through its 182-strong BPI Ka-Negosyo staff in 813 bank branches and 10 provincial centers across the Philippines^{xxxiv}.

4-2-2- AMAX subsidiary provide Entrepreneurship for Low-Income Segments:

Providing entrepreneurial opportunities to low-income markets is a key business strategy of Globe. AMAX is Globe's electronic reloading service that allows for example, is an important way for Globe to reach more prepaid customers, while sharing the economic benefits of its business to small retailers and new entrepreneurs^{xxxv}.

AMAX is Globe's electronic reloading service that allows retailers nationwide to automatically reload prepaid credits to a Globe or Touch Mobile cellphone. As of December 2014, there are approximately 917,000 AMAX retailers nationwide who now have steady income streams and are enjoying profitable returns^{xxxvi}.

4-2-3- Building Communities, Uplifting Lives:

Seeking to provide job opportunities to disadvantaged youth while increasing the human resource base of various businesses, Ayala Foundation started a program called Careers for Street Youth (CSY). This program improves the chances of disadvantaged youth to gain formal jobs in the corporate, business process outsourcing, and service industries through life and work skills training, on-the-job training, and regular one-on-one coaching and mentoring. The program ran from October 2013 to December 2014 and trained 68 participants, ages 18 to 25, who were at least high school graduates and belonged to the lowest income groups. The program's first-year run yielded a Social Return on Investment of 1.31 or a 31 percent return on investment measured through the social, human and economic value created by the program for its beneficiaries^{xxxvii}.

4-2-4- Fostering Youth Leadership in the Countryside:

Ayala Foundation started a new program called Leadership Communities or leadCom, which equips young leaders with the necessary tools to develop and implement impactful projects in their respective communities. The program's ultimate goal is to nurture youth leaders in rural areas who can help transform their communities^{xxxviii}.

With the support of Mitsubishi Corporation, the program trained 199 youth participants coming from 33 project teams from various provinces. 2.5 million P in economic gains has been created through livelihood interventions, direct savings of the beneficiaries from educational assistance, and funds mobilized for other community initiatives. The partnerships created by the program among the youth, local community partners, and local governments are expected to sustain and grow the program's impact in the next three years exercise.

4-2-5- Micro-electronic subsidary provide employment for those with limited opportunities:

Integrated micro-electronic (IMI) has partnered with Technical Education and Skills Development Authority (TESDA) to identify potential employees from a pool of candidates who were not able to complete schooling.

By strategically targeting only high school graduates or those who did not finish their undergraduate degrees, IMI has created job opportunities for talented and hard-working young people whose prospects for social advancement is limited by their lack of a college diploma. To date, a total of 300 scholars have finished the training and have gained employment in IMI^{xl}.

4-2-6- Reaching Out to Indigenous Groups:

Ayala Foundation helped the Iraya-Mangyan people transition to contemporary society by educating them about the environment; improving and creating a market for their handicrafts; providing them access to basic housing and health services; and establishing primary schools for their children. Today, Ayala Foundation's Iraya-Mangyan program reaches over 200 families who live at the foot of Mt. Malasimbo in Sitio Talipanan in Puerto Galera, Oriental Mindoro. From 2010 to 2014, it has turned over 80 houses to Mangyan families. Construction is still ongoing for more houses for at least 150 families xli.

4-2-7- Fostering Gender Equality in Ayala Workforce:

Among 37 senior officers at Ayala, 18 are female, representing almost half of the management team. Ayala have seven male board directors. In all except one subsidiary, Ayala have at least one female board director.

The big size of Ayala group allowed to addressee such subjects: Poverty, Hunger, and Inequality; Bank of the philippine islands promoting financial inclusion, AMAX subsidiary provide entrepreneurship for Low-Income Segments, Ayala Foundation Fostering youth leadership in the countryside.

In addition to that micro-electronic subsidary provide employment for those with limited opportunities, Ayala Foundation Fostering Gender Equality in Ayala Workforce. Moreover ayala Foundation helped the Iraya-Mangyan people transition to contemporary society by educating them about the environment; improving and creating a market for their handicrafts, this what leads to a social value creation.

4-3- Inclusive Quality Education:

4-3-1- Ayala Land provide Quality Secondary Education for All:

One of the highlights in 2014 was the 10th anniversary of Text2Teach, a mobile education intervention in English, Mathematics, Science, and Values Education. This program, implemented in partnership with Microsoft, Globe, the Department of Education, and local governments, has reached over 300,000 students from over 1,000 public elementary schools in 78 cities and municipalities. Text2Teach was recognized by Public Affairs Asia in Hong Kong with a Gold Standard Award for Public-Private Partnerships. The program is on the way to being mainstreamed into the public education system^{xlii}.

The Center of Excellence in Public Elementary Education continues to provide high-quality and values-driven education for poor but bright students from Manila and Batangas. Ayala Foundation launched the Training Institute to bring the CENTEX experience to public elementary schools across the country. In 2014, the Training Institute trained and mentored 565 teachers and reached four schools^{xliii}.

4-3-2- Employee Training at Ayala Land:

All regular employees of the Ayala group are given opportunities for advancement through institutionalized training and career growth programs Average training hours for rank-and-file employees grew by 55 percent in 2014 due to significant increases in the average training hours provided by Ayala Land and LiveIt to their staff. In 2014, the company developed a new level-based program for associate managers so that Ayala Land supervisors may become more effective leaders. Another program called Professionals in Development focuses on providing new hires with comprehensive training on Ayala Land's values and development processes, culminating in an orientation on the company's sustainability framework. There were three training sessions held in 2014^{xliv}.

The big size of ayala group with 11 subsidiaries and a set of social programs and efforts allowed society to moved forward and improve lives by improving health, improving financial wellness for all income levels, employee engagement, promoting financial inclusion, fostering youth leadership in the countryside, providing jobs for those with limited opportunities, reaching out to indigenous groups, fostering gender equality in Ayala workforce, improving education and providing training for employees.

5- Ayala programs and environmental value creation:

Ayala group follow a set of programs in order to create value for the society and environment, Ayala group focused on ecosystems and biodiversity protection, resource efficiency and climate change.

5-1- Ecosystems and Biodiversity Protection:

5-1-1- Ayala Wealth of Wildlife:

Since Ayala developed Makati flagship project in the 1950s, it have gained a reputation as one of the most environmentally conscious developers in the Philippines. Ayala hotels and resorts have been recognized by local and international groups as models of sustainable tourism and biodiversity protection^{xlv}.

5-1-2- Ayala Land Conserving Native Species Through Business:

All Ayala Land developments, Lio and El Nido seek to become more profitable by placing the highest value on the conservation and protection of natural wealth. Ayala Land also works in close partnership with ElNido-Taytay's community to increase economic activity through wildlife and marine ecosystems protection xlvi.

5-1-3- Ayala Land tree planting:

Landscaping in large-scale developments by Ayala Land utilizes 60% to 80% native trees and plants. In Nuvali alone, one of ALI's 19 sustainable estates spread across key growth areas nationwide, there are 60,000 native trees planted, and the trend continues in their other projects all-throughout the country. The plants involved include 75 indigenous tree species from 38 plant families^{xlvii}.

Ayala created an environmental value in field of ecosystems and biodiversity protection by following a set of programs; wealth of wildlife program, conserving native species through business program and tree planting program.

5-2- Resource Efficiency:

5-2-1- Globe Telecom subsidiary finding new life for e-waste:

In partnership with Total Environment Solutions Asset Material Management (TES-AMM), Globe developed a program that would encourage its subscribers and the public to donate their old phones and gadgets for recycling. All proceeds went to construct 10 classrooms in Aklan Province that were destroyed by Typhoon Haiyan^{xlviii}.

There was a moderate increase in the amount of nonhazardous solid waste generated from Ayala business units from 19,835 tonnes in 2011 to 23,685 tonnes in 2012 and 26,817 in 2013. The composition of waste has remained fairly consistent. On the average, waste generated has been 55% residual, 22% recyclable, and 23% compostable. In 2013, Ayala Land diverted 52% of non-hazardous waste from landfills to recycling and reuse facilities. Globe and IMI diverted 29% and 98% of their waste, respectively xlix.

5-2-2- Globe Telecom subsidiary and Water Consumption:

Globe headquarters' gray water collecting system uses rainwater and the air-conditioning system's condensate water for toilet flushing and watering gardens. Water efficient toilets and sensory water faucets in The Globe Tower's restrooms have been installed. These decreased its average monthly water consumption by 15 percent from 5,077 cubic meters during the dry season from January to May 2014 to 4,329 cubic meters during the wet season from June to September of the same year.

5-3- Bank of the Philippine islands and Climate Change Action:

With the World Bank's International Financing Corporation (IFC), Bank of the Philippine islands became the first bank in the Philippines to serve as a financial intermediary for IFC's Sustainable Energy Financing (SEF) program. This covers energy efficiency, renewable energy, and climate resilience. From 2010 until the end of 2014, BPI has approved a total of \$\frac{p}{27.53}\$ billion in loans to fund 174 sustainable energy projects. Fifty-eight percent financed 110 energy efficiency projects while about a third went to 51 renewable energy projects The remaining eight percent funded 13 projects. relating to climate resilience in agriculture and water supply. These projects could generate 1,058 GWh of renewable power and save 234 GWh of electricity valued at \$\frac{p}{3.5}\$ billion annually, preventing \$813,500 tonnes of carbon emissions from being emitted every year throughout the projects' lifetimes \(\frac{1}{2} \).

Ayala created an environmental value in field of resource efficiency by following a set of programs; new life for electronic waste program, reducing water consumption program, supporting solutions to climate change

The previous environment programs of ayala group and efforts allowed society and environment to move forward, improve and protect Ecosystems and Biodiversity Protection, increase resource efficiency by finding new life for E-waste and decreasing water consumption.

6- Ayala subsidiaries programs and economic value creation:

As we see above, all Ayala social and environmental programs create value for the society, in the same time these programs yields to a economic value creation across Ayala subsidiaries. In addition to that Ayala group also followed a set of programs to create economic value such as; engagement activities with suppliers, creating jobs, empowering SMEs and cooperatives, finding innovative and Inclusive Ways to Hire Employees, Improving Pedestrian and Transit Connectivity, Providing affordable homes, strengthening local economies through the resiliency of water assets, energy efficiency initiatives and investing in conventional and renewable energy sources.

6-1- Sustainable Economic Growth:

6-1-1- Economic value generated, distributed and retained:

Ayala subsidiaries programs yields to an economic value creation in Ayala group: lii

- Ayala's profits have been growing above 20 percent for the past three years. The parent company's net income increased by 46 percent in 2014 to 18.6 billion \mathbb{P} .
- Ayala's core net income actually grew by 25 percent in 2014. In 2014, Ayala consolidated revenues reached 328.45 billion ₱, 12 percent higher compared to 294.17 billion ₱ in 2013.
- Revenues increase d from 130,571 million P in 2012 to 159,412 million P in 2013 and 184,276 million P in 2014.
- Net income increased from 10.504 million P in 2012 to 12.778 million P in 2013 and 18.609 million P in 2014.
- Cash dividends to common shares increased from 2.334 million P in 2012 to 2.877 million P in 2013 and 2.928 million P in 2014.
- Total assets increased from 510.904 million \mathbb{P} in 2012 to 599.644 million \mathbb{P} in 2013 and 726.048 million \mathbb{P} in 2014.
- Earning basic (per share) increase d from 17.03 million Pin 2012 to 20.53 million Pin 2013 and 29.83 million Pin 2014.

6-1-2- Engagement Activities with Suppliers:

Globe has established vendor programs, such as the Business Partner Awards and the Globe Vendor Council, to foster stronger relations with suppliers. Globe's vendor clinics and technology briefings provide learning and improvement opportunities^{liii}.

Manila Water has established several programs for vendors to build long-term partnerships and mutually beneficial relationships with its suppliers. The company's vendor development programs include sustainability summits, recognition programs, technical assistance, monthly safety forums, a business continuity development program, and risk and traffic management programs^{liv}.

6-1-3- Creating Jobs:

Together with public spending for construction, Ayala Land contributed to this growth through its vigorous expansion into rural capitals that employed about 20,000 contractual, outsourced, and daily workers by the end of 2014. Of this total, 9,497 jobs were outsourced

by Ayala Property Management Corporation, a subsidiary of Ayala Land; for every non-local hire, there are two local hires^{lv}.

6-1-4- Empowering SMEs and Cooperatives

Inclusive economic growth is a mandate of Manila Water. Since the 1990s, the company has been purchasing from small- and medium-scale enterprises (SMEs), and continues to grow its abuhayan para sa Barangay (KPSB) program together with Manila Water Foundation. ^{lvi}

6-1-5- Finding Innovative and Inclusive Ways to Hire Employees:

Since 2006, Ayala Auto has been welcoming student trainees from at least seven partner schools, providing them with first-hand technical experiences through actual dealership workshop operations, From 2012-2014, the Ayala Auto group welcomed 430 cadet technicians or on-the-job trainees and employed 101 graduates^{lvii}.

Targeting fresh engineering graduates, IMI University is a six-month comprehensive training program that further hones the competency of those keen to pursue careers in Manufacturing Engineering, Test and Systems Design, and Value Engineering, among other tracks Designed to promote camaraderie and sharing of knowledge, the program combines classroom lectures and workshops with on-the-job experiences. IMI University has so far produced 49 regular IMI employees since 2012 that strengthen the spirit liviii.

6-1-6- Direct Job Creation:

About 11 percent, or 34.78 billion ₱ of Ayala revenues was distributed to it direct hires in 2014. Ayala grow its businesses and invest in new areas and create a substantial number of jobs. As of this reporting its employee headcount grew by 10 percent to 42,827 from 2013^{lix}.

By using its subsidiaries ayala group achieved Sustainable Economic Growth from several programs; Globe has established vendor programs, Manila Water has established several programs for vendors to build long-term partnerships and mutually beneficial relationships with its suppliers, Ayala Land contributed to this growth through its vigorous expansion into rural capitals Ayala Auto has been welcoming student trainees from at least seven partner schools.

6-2- Resilient and inclusive infrastructure and communities

6-2-1- Improving Pedestrian and Transit Connectivity:

Ayala biggest and most mature estates in Makati, BGC, Nuvali, and Cebu City now have a combined area of 2,387 hectares. Throughout the 210 hectares of Ayala Makati development, Ayala have constructed a four-kilometer network of pedestrian underpasses, elevated walkways, and covered walks which benefits about a million people. This has considerably decreased the need to use cars around the Makati business district and has promoted a healthy culture of walking. The number of daily pedestrians that use the network through Ayala Avenue has increased five-fold to over 210,000 in 2013 from a total of 40,000 in 1995. In response to new pockets of development, the Makati Commercial Estates Association has invested an additional 117 million \mathbb{P} for the extension of the elevated walkway segments^{lx}.

6-2-2- Providing Affordable Homes:

By broadening its market base and embedding inclusive social growth in its economic strategy, Ayala Land has provided more Filipinos with practical, beautifully designed homes in peaceful and secure communities. In 2014, BellaVita reported revenues of P115.6 million, an 81 percent increase, as a result of strong sales of its projects in General Trias, Cavite, and Alaminos, Laguna. It aims to expand its reach in Cabanatuan, Nueva Ecija, and Pililla, Rizal^{lxi}.

6-2-3- Strengthening Local Economies through the Resiliency of Water Assets:

The company implementing a five-year plan called Natural Calamity Contingency and Mitigation. This includes the construction of emergency reservoirs (seven for flood contingency and 21 for earthquake contingency) and seismic retrofitting of water supply facilities and pipe bridges^{lxii}.

Ayala group create an economic value by strengthening local economies through the resiliency of water Assets, providing affordable homes, improving pedestrian and transit connectivity.

6-3- Affordable and Reliable Energy:

6-3-1- Investing in Conventional and Renewable Energy Sources:

Since January 2014, GNPower has been functioning to full capacity, accounting for 96 percent of the total electricity ayala generated for the year. AC Energy owns a 17 percent stake in GNPower, which serves around 2,900 households. The GNPower Mariveles plant has a capacity of 600 MW and used 1.8 million tonnes of coal equivalent to 53.80 million GJ of energy ^{lxiii}.

6-3-2- Fuel Efficiency Programs:

Ayala Land focused on the efficient use of energy through new technologies and design and behavioral approaches. These initiatives include energy conservation measures and the development of carbon sinks through tree planting and retention of mangroves. The company intends to measure its metrics for this area in the coming years to identify areas for improvement. Liv

6-3-3- Energy Efficiency Initiatives:

The Ayala group implements various programs to ensure that it energy consumption is managed well and are at optimum levels of efficiency. Even though it business operations are growing, and therefore demand more energy use, it aspire to decrease the intensity of Ayala consumption. BPI replaced the centralized air-conditioning system in its head and main offices to help reduce its total electricity consumption by 5 percent^{lxv}.

Ayala group create an economic value by Investing in conventional and renewable energy sources fuel efficiency Programs, energy Efficiency Initiatives

We see that most business performance indicators have improved and bring value for the group

in addition to that, there are others business indicators that rise the value of the group, we provide some these indicators as follows lxvi :

- In 2014 Asiamoney conferred ayla in 4th Best Overall for Corporate Governance, 5th Best for Disclosure and Transparency and 3rd Best for Responsibilities of Management and the Board of Directors, in 2014, Ayala Ranked 1st Best Corporate Social Responsibility.
- in 2014 Corporate Governance Asia conferred ayla 2nd Asian Company Secretary of the Year
- Ayala Corporation and Manila Water corporate secretary Solomon M. Hermosura is among Asia's best.
- in 2014 Finance Asia conferred ayala 1st Best Managed Company in the Philippines Ranked 1st - Best Corporate Governance and Best Corporate Social Responsibility Ayala also ranked 2nd - Best Investor Relations.

The previous social and environment programs and efforts of ayala group, moved society forward and protect the environment, in the same time improve most business performance indicators and moved ayala group business forward, Ayala become number 1 as best corporate governance and Best Corporate Social Responsibility and best managed company in the Philippines.

Conclusion:

The new idea shared value provide a big opportunity for business corporations to make more profit and achieve growth, in the same time solving a social problems and create value for society, Ayala group have already start to change the way of doing business and apply the concept of shared value.

The paper makes a number of significant theoretical contributions to the literature. First, we make useful analyses for shared value creation and corporate size. Second, this study demonstrates why big is matter for shared value creation.

Third, the results of this study enrich the shared value creation literature by suggesting that big size corporations and international groups have more influences on society and environmental and are better to create shared value for several reasons; process innovation, advanced technology, Economies of scale (Productive Corporation), power of big size and strong marketing.

In addition, we make a number of empirical contributions; the large size of the group with 11 subsidiaries helped and allowed ayala to follow a set of programs in many fields; real estate financial services, telecommunications, water infrastructure, electronics manufacturing, automotive distributorship and dealership, and business process outsourcing, and new investments in power generation, transport infrastructure and education.

Gathering value creation from all of these defferent field and the large size of the group lead Ayala to a shared value creation in high degree. Ayala social and environmental programed provided value for society and environment, in the same created an econimic value for the group.

Notes and References:

And firm success , The 2016 WEI International Academic Conference Proceedings Vienna, Austria,p 134.

ⁱ Prasertsang.S: A conceptual model of creating shared value strategy, business competitiveness

ii Review: A Higher Capitalism,Reviewed Work(s): "Creating Shared Value" by Michael E. Porter and Mark R. Kramer , The Wilson Quarterly (1976-), Vol. 35, No. 2 (SPRING 2011), pp. 70-71

iii Porter .M.E & Kramer.M (2011): Creating Shared Value, Harvard Business Review ,P66.

^{iv} Pfitzer.M,Bockstette.v,Stamp.M: Companies that deliver both social benefit and business value rely on five mutually reinforcing elements.

Innovating for Shared Value., harvard Business review September 2013, p4.

^v Bowea.C ,Horstb.D: Positive externalities, knowledge exchange and corporate farm extension services; a case study on creating shared value in a water scarce area,Ecosystem Services 15(2015)1–10

vi Serra J, Font X, Ivanova M. (2016) 'Creating shared value in destination management organisations: The case of Turisme de Barcelona'. Journal of Destination Marketing & Management,p2 doi: 10.1016/j.jdmm.2016.06.005

vii Prasertsang.S: A CONCEPTUAL MODEL OF CREATING SHARED VALUE STRATEGY, BUSINESS OMPETITIVENESS AND FIRM SUCCESS, The 2016 WEI International Academic Conference Proceedings Vienna, Austria,p 136.

viii Ibid,p 136

ix Serra J, Font X, Ivanova M. (2016), op cit,p2.

x Ibid p3

xi Serra J, Font X, Ivanova M. (2016) 'Creating shared value in destination management organisations: The case of Turisme de Barcelona'. Journal of Destination Marketing & Management,p3

```
doi: 10.1016/j.jdmm.2016.06.005
```

max?jsid=802F890F1F75C139744977313033DF5A.41482586193648, 25/09/2017.

 $\underline{max?jsid=0FC4093BFE34E3089B8B0C18C4C155F8.41482404528586}, 05/10/2017.$

xii Porter, M, Hills .G, Pfitzer.M, Patscheke .S, Hawkins.E(2013): Measuring Shared Value, How to Unlock Value by Linking Social and Business Results FSG,USA,2013,p1.

xiii Porter, M, Hills .G, Pfitzer.M, Patscheke .S, Hawkins.E(2013),op cit ,p1.

 $^{^{\}rm xiv}$ DESMET.K , PARENTE.S.L (2010): BIGGER IS BETTER: MARKET SIZE, DEMAND ELASTICITY, AND INNOVATION, INTERNATIONAL ECONOMIC REVIEW Vol. 51, No. 2, p 320.

^{xv} Gilbert.J, Henske.P, Singh.A (2003): Rebuilding Big Pharma's Business Model: The blockbuster business model that underpinned Big Pharma's success is now irreparably broken. The industry needs a new approach the Business & Medicine Report, Windhover Information, Vol. 21, No. 10, November 2003,p3.

xvi Serafeim.G (2014): The Role of the Corporation in Society: An Alternative View and Opportunities for Future Research, working paper, Harverd business school, p 7.

Ibid, p8.

xviii http://notes.tyrocity.com/characteristics-of-multinational-companies/, 29/08/2017.

xix https://www.coursehero.com/file/12277531/COMPANY-PROFILE/,22/09/2017.

xx http://www.ayala.com.ph/about_us/,23/09/2017.

xxi http://www.ayala.com.ph/about_us/page/business-interests/, 23/09/2017.

xxii ayala Sustainability Report (2014): Let's create shared value,p51.

xxiii http://news.abs-cbn.com/business/10/13/08/doing-business-bottom-pyramid-ayala-group-experience, 24/09/2017.

xxiv https://www.globe.com.ph/prepaid/loading-services/autoload-

xxv ayala Sustainability Report (2014): Let's create shared value,p73.

xxvi avala Sustainability Report (2014): Let's create shared value,p74.

xxvii ayala Sustainability Report (2014): Let's create shared value,p74

xxviii IMI ANNUAL AND SUSTAINABILITY REPORT(2015), p38.

xxix ayala Sustainability Report (2014): Let's create shared value,p75.

xxx ayala Sustainability Report (2014): Let's create shared value,p48.

xxxi ayala Sustainability Report (2014): Let's create shared value,p52.

xxxii ayala Sustainability Report (2014): Let's create shared value,p62.

ayala Sustainability Report (2014): Let's create shared value,p50.

xxxiv https://www.bpiexpressonline.com/p/1/49/bpi-easy-saver,227/10/2016.

xxxv http://news.abs-cbn.com/business/10/13/08/doing-business-bottom-pyramid-ayala-group-experience, 03/10/2017.

xxxvi https://www.globe.com.ph/prepaid/loading-services/autoload-

xxxviii http://news.abs-cbn.com/business/10/13/08/doing-business-bottom-pyramid-ayala-group-experience, 07/10/2017.

xxxviii http://www.ayalafoundation.org/ourprograms/youth-leadership-2/leadcom/, 09/10/2017.

xxxix http://www.ayala.com.ph/governance/page/corporate-social-responsibility/56, 11/10/2017.

xl http://www.ayala.com.ph/sustainability/page/people, 17/10/2017.

xli Sustainability Report (2012): Ayala better, p35.

xlii http://www.ayala.com.ph/governance/page/corporate-social-responsibility/56, 21/10/2017.

xliii http://www.ayala.com.ph/governance/page/corporate-social-responsibility/56, 21/10/2017.

xliv http://www.ayala.com.ph/governance/page/employee-relations-training-and-development/56,28/11/2016.

xlv Ayala Land to build resort hotel in El Nido <u>www.business.inquirer.net/185963/ayala-land-to-build-resort-hotel-in-el-nido#ixzz4TNle5Khf</u>, 22/10/2017.

xlvi Ayala Malls leads the way to green living: www.philstar.com/business-life/2012/07/09/825721/ayala-malls-leads-way-green-living, 25/10/2017.

xlvii Back to our roots: Leading a Philippine ecological revolution with native trees, http://www.ayalaland.com.ph/2016/08/23/leading-philippine-ecological-revolution-native-trees/, 27/10/2017.

xlviii Globe Telecom taps e-waste recycling recovery specialist TES-AMM for Project 1 Phone https://www.globe.com.ph/press-room/tes-amm-for-project-1-phone, 28/10/2017.

xlix AYALA Sustainability Report (2013), p32.

¹ ayala Sustainability Report (2014): Let's create shared value,p75

li ayala Sustainability Report (2014): Let's create shared value,p74

lii http://www.ayala.com.ph/sustainability/page/economy, 03/12/2016.

liii avala Sustainability Report (2014): Let's create shared value,p35.

liv Sustainability Report (2014): Let's create shared value,p35.

^{lv} Sustainability Report (2014): Let's create shared value,p36.

http://thestandard.com.ph/news/26th-anniversary-issue-on-csr/79220/manila-water-promotes-development.html, 08/11/2017.

lvii ayala Sustainability Report (2014): Let's create shared value,p37.

lviii ayala Sustainability Report (2014): Let's create shared value,p37.

lix ayala Sustainability Report (2014): Let's create shared value,p38.

lx ayala Sustainability Report (2014): Let's create shared value,p40.

lxi ayala Sustainability Report (2014): Let's create shared value,p40.

lxii ayala Sustainability Report (2014): Let's create shared value,p41.

lxiii ayala Sustainability Report (2014): Let's create shared value,p42.

kiv http://www.ayala.com.ph/about_us/page/innovation, 11/11/2017.

kv http://www.ayala.com.ph/sustainability/page/environment, 18/11/2017.

lxvi http://www.ayala.com.ph/about_us/page/awards,21/11/2017.