

## **EVALUASI RESPONSIVITAS PROGRAM KABUPATEN SEHAT DI KABUPATEN BLITAR**

Handy Twinosa<sup>1</sup>, Agam Marsoyo<sup>2</sup>

<sup>1</sup>Universitas Gadjah Mada

<sup>2</sup> Universitas Gadjah Mada

<sup>1</sup>Email : adityapedja@hotmail.com

---

### **ABSTRACT**

The main challenge of commercial development is to arrange the capital. Commercial real estate developments require a large amount of capital upfront, as a one-time investment, and the return on investment occurs over a long period of time. In this case, PT. Dharma Development, Tbk. has been facing a capital problem for this project. The purpose of this research is to explore some alternative financing options for the commercial real estate developers, and suggest the most suitable financing options for the case of this research. Other than that, the primary objective is to answer the research question "what is the alternative project financing model that feasible for the company and also aligns with the corporate's fundamental strategy". With the characteristics of large-scale investment (long pay-back period and capital intensive), the financing of commercial real estate is even more difficult than residential real estate and also become crucial problem for the development of commercial real estate. To get better understanding the research will use several analysis techniques. First is to understand what are the available and financing practice in other countries and to review what is available in Indonesia. Exploration of financing practice in Indonesia relating to the regulation, tax and system capability become the focus of this research. Second, this research discusses industry specific matter using several financial tools to support the decision making. Discounted rate will be used to do a valuation for every stakeholders in the project. It expected could determine how the capital structure would arrange. The technique use is capital budgeting. Capital budgeting is a process to analyze, evaluate and make decision. Finally, at the end of this final project writing, the author will provide a recommendation to find the best option to arrange this project in order to get highest profitability of this project.

*Keywords:* Project financing; crowdfunding; Indonesia real estate; partnership

### **ABSTRAK**

Tantangan utama dalam mengembangkan pengembangan komersial adalah bagaimana merancang struktur modalnya. Ini adalah investasi besar dan ekspektasi pengembaliannya biasanya dalam jangka waktu yang lama. Dalam kasus ini PT. Dharma Development, Tbk menghadapi masalah modal untuk proyek ini. Tujuan dari proyek akhir ini adalah untuk mengeksplorasi beberapa alternatif pembiayaan untuk pengembang kecil dan menengah dan juga menyarankan opsi pembiayaan yang paling cocok untuk kasus penelitian ini. Tujuan penelitian ini adalah untuk mendapatkan rekomendasi model pembiayaan yang paling efektif yang memberikan keuntungan untuk semua pihak. Penelitian meng-evaluasi model ekonomi dalam investasi, kapabilitas perusahaan dan kerjasama yang menguntungkan. Selain itu tujuan utamanya adalah untuk menjawab pertanyaan dalam penelitian ini yaitu apa alternatif model pembiayaan proyek yang layak untuk perusahaan dan sesuai dengan strategi fundamental dari korporasi. Juga untuk menyelamatkan kondisi finansial proyek saat ini dan bagaimana proyek ini bisa terus berjalan. Dengan karakteristiknya yaitu investasi skala besar, waktu pengembalian yang cukup lama, membuat pembiayaan real estate komersial menjadi sangat sulit dibandingkan

dengan perumahan dan ini menjadi problem krusial dari pengembangan real estate komersial. Untuk mendapatkan pengertian yang lebih baik, penelitian ini akan menggunakan beberapa teknik analisis. Pertama untuk memahami apa saja praktek pembiayaan yang ada di negara lain dan membandingkan apa yang ada di Indonesia. Eksplorasi praktek pembiayaan di Indonesia terkait regulasi, pajak dan kapabilitas sistem menjadi fokus dari penelitian ini. Penelitian ini menggunakan beberapa alat finansial untuk mendukung pengambilan keputusan. Tarif diskonto akan digunakan untuk menvaluasi semua pemilik saham di proyek ini. Ini akan menentukan bagaimana struktur modal akan direncanakan. Teknik yang akan digunakan adalah teknik penganggaran modal. Penganggaran modal adalah proses untuk meng-analisa, meng-evaluasi dan mengambil keputusan. Pada bagian akhir dari penelitian ini, penulis akan mempersiapkan rekomendasi dari opsi yang terbaik untuk mengatur proyek ini agar mendapatkan keuntungan proyek yang paling tinggi.

*Kata Kunci:* Pembiayaan proyek; crowdfunding; real estate Indonesia; kerjasama modal

## INTRODUCTION

PT. Trimitra Arsitektur Indonesia is a one of subsidiaries of PT. Dharma Development Tbk. PT. Trimitra Arsitektur Indonesia has a project in Kalimantan called Dharma City. It is a 30 Hectares development contains landed houses, school, clubhouse and shop-houses. The project started in 2011 and performed well in the first two years. The initial strategy of the master plan was to finance the commercial mixed-use development with profit of the landed residential.

In 2013, however, problems surfaced. Bank Indonesia published a new regulation for the Indonesia property market/credit called Loan to Value, or Financing to Value, which severely impacted the sales performance of the project. The new regulation was to balance the property prices against the macro economy to avoid a price bubble. Before this regulation, the developer could use pre-sales cash flow to finance the construction of housing. Now, however, the project's progress needed to reach 90% completion before the finance from KPR (House Loan) could be released by the bank. Bank Indonesia also limited the credit that can be given by the financial bank lender to the buyer. To the buyer; the first home can only maximum get 70% from the loan, second home 60% and third 50%. This condition is quite painful for any developer and caused major decline on all the sales of the property sales.

The Property Sector is one of the investment instrument that frequently choose by investor. Property and real estate is usually a long-term investment, and many companies use property as a multifunctional asset for collateral. That is why property and Real Estate Companies often need significant capital on hand to arrange a project. The main character of property and real estate investment is the land price. Land price will always increase from year to year. The parties that determine the price is not the market but the people who own the land and own the development. That is the reason that the Property and Real Estate sector has been a preferred option for investors and creditors alike.

Indonesia's retail landscape is undergoing profound change as modern outlets increasingly replace wet markets and independent small shops. High consumer confidence, an expanding middle class and rising personal incomes have made private consumption the most important component of Indonesia's economy, which has in turn attracted numerous global retailers. Partnerships among banks and the retail sector to offer incentives and consumer credit are also fuelling spending. While rising costs and increasing competition in the main urban areas are putting pressure on margins in the retail sector, investors can tap new growth potential in regions

that have growing demand, but are still under-served by modern outlets and shopping malls. A major geographic shift is taking place in Indonesia's retail landscape, with the center of attention increasingly moving from Greater Jakarta and Bali's main tourist areas to regional capital cities across the country. Indonesia's modern retail sector holds huge potential for future growth, particularly in the hypermarket sector as well as department stores and specialities outlets. Competition in the sector will continue to heat up as expansion plans of major retailers get underway, albeit at a lesser pace than they may have hoped due to government regulations.

With the aforementioned conditions, investing in Property should be an investment option available to every level of society. This research is created with a spirit that everyone should be able to invest in real estate. On the other hand, growth of the retail industry in Indonesia has reached quite a significant level. But following another data stated that it was moving from the hot area to the emerging new market due to growing of Indonesia economy. This research demonstrates how property and real estate should be accessible to all levels of society, and can lead to significant lifestyle changes. This is applied from the point of view of the user, developer and investor.

## **METHODS**

### **Business issue exploration**

The development of commercial real estate and residential real estate is quite different in many aspects. The source of income is not the same, for residential real estate the income is sales income minus development cost; however, that of commercial real estate is rental income and from exit valuation gain. Moreover, the development of commercial real estate is one-stage investment, but that of residential real estate can be done in a staged manner. So developing commercial real estate needs large amount of capital compared to residential real estate.

The commercial real estate industry is an emerging industry in real estate industry. With the urbanization of most cities in Indonesia, the development of commercial real estate should catch up with the development of the city. However, in Indonesia the development of commercial real estate is not mature, including developing ways, operating ways and especially financing ways.

The purpose of this final project is to explore some alternative financing options for the small and medium commercial real estate developers and suggest the most suitable financing options for the case of this research. This research is intended to get a most effective financing model that gives benefits to all business partners. The research evaluates an economic model taking into account all variables regulated in property development project investment, company's capability and beneficial partnership.

The primary objective is to answer the research question; "what is the alternative project financing model that is feasible for the company, and also align with the corporate's fundamental strategies". In addition, what are the underlying assumptions to secure the company's financial standing and how will the project perform over the entire life cycle.

### **Conceptual Framework**

The conceptual framework of this research is generated to explore business issues on this Special Purpose Vehicle (SPV) Company to fulfill its investment financing needs, and to ensure this Mall project can generate sustainable income for the company and its shareholders. To get a better

understanding the research would use several analysis techniques. Firstly, to understand the current and available financing practices in other countries, and to review what is available in Indonesia. Exploration of financing practice in Indonesia relate to the regulation, tax and system capability become the focus of this research. This research discusses industry specific matter using several financial tools to support the decision making. Discounted rate will be used to do a valuation for all stakeholders in the project. It will determine how the capital structure would arrange. The technique used here is capital budgeting. Capital budgeting is a process used to analyze, evaluate and make informed decisions, and to determine whether a project is worth pursuing. As a general guide, businesses should pursue any opportunities that enhance shareholder value. In this research, capital budgeting will be used to do valuations for each option and for each stakeholders to reach the most optimum solution.

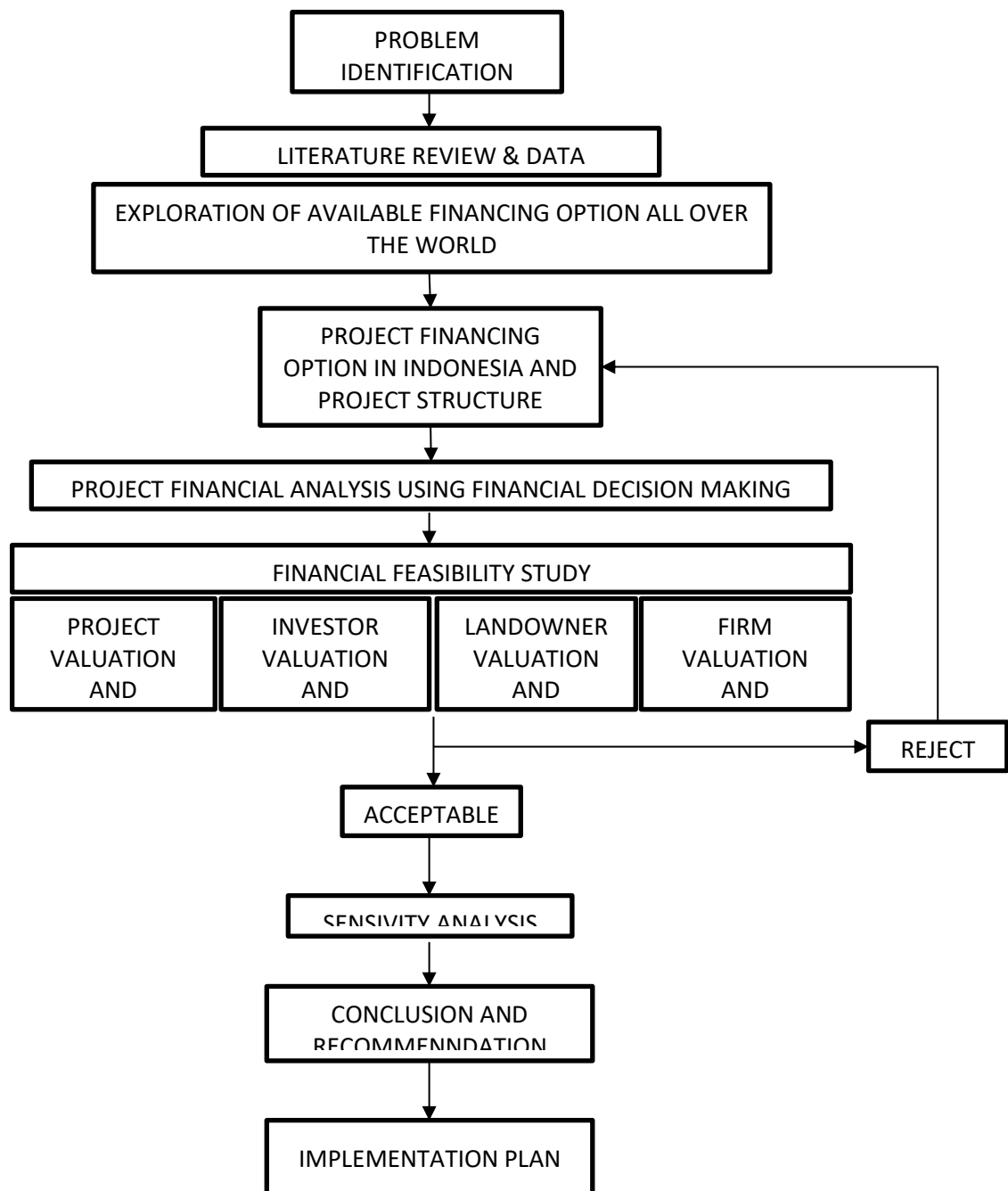


Figure 1. Framework diagram

## **Method of data collection and analysis**

Research methodology deals with examining reality in a systematic way. The information of literature review mostly comes from E-books, E-journal, and books and also refers to a lot of related former studies. Many statistical figures are collected from some research by relevant institution (Bank Indonesia, Badan Pusat Statistik, etc) and private company report.

This writing is intended to seek the alternative project financing besides the common methods that projects traditionally arranged. Conventional direct financing has been a research area for a long time. There are many differing views on what constitutes appropriate project finance. This research will therefore clarify the concept of project finance, and also work with the case study to seek alternative financing strategies. Commercial and technical financial issues will be treated in this research, as they constitute the largest part of the risk in project finance.

## **RESULTS AND DISCUSSION**

### **Project Financing Definition**

Project financing may be defined as the raising of funds on a limited-recourse or nonrecourse basis to finance an economically separable capital investment project in which the providers of the funds look primarily to the cash flow from the project as the source of funds to service their loans and provide the return of and a return on their equity invested in the project (Finnerty, 2007).

The difference between project financing and conventional financing is explained in a book titled *Financing Asset Based Financial Engineering chapter 1* as follows: "Project financing should be distinguished from the conventional direct financing or any financing on firm's general credit. In connection with a conventional direct financing, lenders to the firm look to the firm's entire asset portfolio to generate the cash flow to service their loans. The assets and their financing are integrated into the firm's asset and liability portfolios. Often, such loans are not secured by any pledge of collateral. The critical distinguishing features of a project financing is that the project is a distinct legal entity, project assets, project related contracts and project cash flow are segregated to a substantial degree from the sponsoring entity. The financial structure is designed to allocate financial return and risk more efficiently than a conventional financing structure." (Finnerty, 2007: 2)

Advantages of project financing techniques include:

1. Minimize self-equity commitment.
2. Risk sharing.
3. Any pledge is not integrated with the company's other asset.

Disadvantage of project financing techniques include:

1. Majority investors to the equity will have control to the project. If the major investors are not capable in the project industry then may affect the quality of the project.
2. Often risk sharing negotiation will take quite long time while the project need to start soon.

- Higher transaction costs. These higher transaction costs reflect the legal expense involved in designing the project structure, researching and dealing with project-related tax and legal issues, and preparing the necessary project ownership, loan documentation, and other contracts.

### Financing Options of Commercial Real Estate Development In The World

There are many funding options available in the global capital market. Funding, either equity or debt, is an important enabler of growth. Funding allows businesses to invest in people, materials, facilities or property to produce more goods or services. However, funding is not the only driver of growth. Businesses will only make economically rational decisions to invest if they see an increase, or potential increase, in demand for the goods or services they produce, or if they believe that the investment will enable them to get rational return.

According to Investopedia, capital funding is the money that lenders and equity holders provide to a business. Basically there two types of funding: Equity and Debt. With the developments of capital markets in the world, some options in between equity and debt were developed. In real estate, there are some options explain in table below:

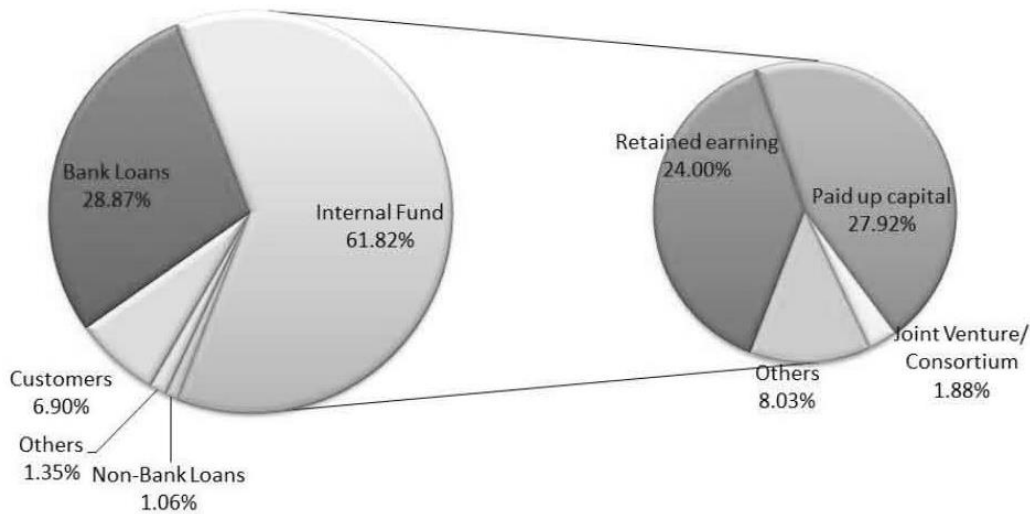
**Table 3. Table of investment instrument**

Type	Intruments	Definition
Equity	Stocks	A type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings. (Source: <a href="http://www.investopedia.com">www.investopedia.com</a> )
	Real Estate Investment Trust	A type of security that invests in real estate through property or mortgages and often trades on major exchanges like a stock. (Source: <a href="http://www.investopedia.com">www.investopedia.com</a> )
	Equity Crowdfunding	A type of crowdfund investment that the investors will receive shares for the investment in hopes that the company will pay us a dividend on the shares out of the company's profits, or expecting the company to grow to a point where the investor will eventually be able to sell the shares at a higher price then the investor paid for them.
	Private Equity	A non-bank person or organization that trades securities in large enough share quantities or dollar amounts that they qualify for preferential treatment and lower commissions. (Source: <a href="http://www.investopedia.com">www.investopedia.com</a> ). It could be Institutional or Individual. e.g pension fund company, insurance comapny, etc.
Debt	Commercial Mortgage Backed Securities	A type of mortgage-backed security that is secured by the loan on a commercial property. A CMBS can provide liquidity to real estate investors and to commercial lenders. (Source: <a href="http://www.investopedia.com">www.investopedia.com</a> )
	Asset Backed Securities	A financial security backed by a loan, lease or receivables against assets other than real estate and mortgage-backed securities. For investors, asset-backed securities are an alternative to investing in corporate debt. (Source: <a href="http://www.investopedia.com">www.investopedia.com</a> )
	Mezzanine Lender	Mezzanine debt has embedded equity instrument (usually warrants) attached, which increase the value of the subordinated debt and allow for greater flexibility when dealing with bondholders. Mezzanine debt behaves more like stock than debt because the embedded options make the conversion of the debt into stock very attractive. (Source: <a href="http://www.investopedia.com">www.investopedia.com</a> )

		Bonds	A bond is a debt investment in which an investor loans money to an entity (typically corporate or governmental) which borrows the funds for a defined period of time at a variable or fixed interest rate.
		Debt Crowdfunding	A type of crowdfund investment where the goal is to loan investor's money to the company with a fixed repayment term and the company pays us a specified interest rate during the term of the loan. (Source: www.investopedia.com)
	Private	Institutional Lender	Financial intermediaries who invest in loans and other securities on behalf of investors or depositors.
		Bank Loan	A credit or loan which records the loan agreement between a borrower and a bank.

**Commercial Real Estate Project Financing Situation in Indonesia**

According to Bank Indonesia data, it shows that almost 60%-70% capital of Indonesian commercial real estate developers comes from internal fund. Also according to the same data, almost 30% of the investment capital of property comes from bank loans. Therefore, in development of commercial real estate, the financing channels are limited, which meanwhile results in substantial risk on bank.



Source : Bank Indonesia, Property Sales Survey Report, March 2015

**Figure 1. Source of property financing (Developers)**

Currently the main financing options of commercial real estate developers are as follows:

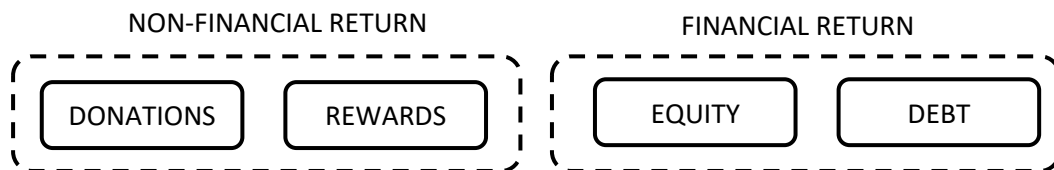
1. Bank loans. Other than self-financing, bank loans are the main financing source of commercial real estate developers. However, as the government has implemented tighter monetary policies on loans in the real estate industry, this option is become less accessible.
2. Internal Fund, according to Bank Indonesia survey report internal fund still become the biggest portion of commercial real estate development in Indonesia. Usually property companies are doing joint venture or any other consortium or use pre-sales cash flow.

3. Go on listed in the stock market or issue corporate bonds. However, because of the high requirements, only a few of real estate companies are capable of adopting this choice. In the case of this project, go on listed means PT. TAI need helps from the holding company to issue the debt which will raise other issues will raises.
4. Pension and insurance fund in Indonesia is not really fond to real estate. They are more prefer investing in fixed income instrument like bonds, stocks, long term deposits, etc.
5. Real Estate Investment Trusts (REITs) or Dana Investasi Real Estate (DIRE, through KIK or Kontrak Investasi Kolektif), doing this strategy in a very intial stage of project might not be feasible as currently regulation in Indonesia does not allow that (Bapepam – LK, Pedoman KIK IX.M2). But this could be a good exit strategy for all the investors in later stage.
6. ABS/MBS, in Indonesia this options are not really popular as only 1 company is licensed to practice this facility (PT. Sarana Multigriya Finansial). In fact this instrument, known as KIK-EBA (Efek Beragun Aset), is still young in Indonesia. The regulation is just official in 2008 while the first transaction was just started in 2009.
7. There are also other seldom used financing methods, such as foreign private fund, financial leasing and loans from foreign banks. But again these are a very expensive options to do.

So the financing channels of Indonesian commercial real estate are going to be diverse but now bank loans and internal fund are still the main channel and other channels are seldom used due to the regulation support and business environment (risk appetite).

**Public Participation Financing: Crowdfunding**

Generally Crowdfunding means financing a product, idea, or venture using small amounts of money raised from the “crowd,” or members of the public. Crowdfunding is the intersection between microfinance and crowdsourcing. The objective of crowdfunding is to collect capital for investment from a very large audience instead of from a very small group of sophisticated investors. In this large group each individual will provide usually a small amount.



**Figure 2. Types of crowdfunding**

Many people still confuse about the different between Crowdfunding and REITs. Many literature in internet also does not properly distinguished both investment method. That is one of the resistor of crowdfunding development in many part of the world. There are several critical distinctions between the two that investors should be aware of.

Tax is become one of the main difference between REITs and Crowdfunding. In some country which already mature with crowdfunding regulation allow “anyone” (each country has regulation for this level accredited to non-accredited people) to be able directly invest in crowdfunding project in exchange to equity. So the crowdfunding investors can take advantage of “pass through”



benefits available through the limited partnership or limited liability company structure. Depreciation and interest benefits can be passed through to individual investors to reducing their overall tax liability. While dividend distributions to REIT investors are taxed at “ordinary” income tax rates. This investors advantage in crowdfunding taxes is according to US tax regulation.

Other than that, Crowdfunding and REITs are very different in terms of scope of the project variety. When investors are investing in crowdfunding offering, investors are in control on what investor want to invest in. REITs in contrast, own an array of properties. Some investors may prefer owning a piece of a larger portfolio, while others may want the ability to invest in individual properties in their own backyard.

There is also a major difference in scale. REITs are large entities that generally own larger-scale commercial properties. While some real estate crowdfunding platforms offer these types of investments, they also offer many niche investments, such as smaller retail centers or multi-family buildings.

### **Decision Making Tools**

According to Finnerty, 2007. The initial step in measuring the value of a capital investment project is estimating the expected incremental after-tax cash flows. There are three important concepts that are involved. Firstly, the cost and benefits that based on the cash basis should be measured in terms of cash flow rather than the non-cash earnings. Failure to raise enough cash could causes the firm to file for bankruptcy. Cash flow timing also affects value because of the time value of money. The second is that the cash flow must be based on an incremental basis. Any factors that happen before the project is undertaken is not relevant to the analysis. Only future expenditures and revenues are relevant to the decision whether to proceed with the project. The last one is all the cash flow should be measured on an after-tax basis, as taxes represent one of the costs of doing business.

The objective of this research is to find the most effective alternative project financing. NPV and IRR is the most common method to identify whether a project is could be undertaken or not. In this research the valuation will take position from several point of view of stakeholders. The discounted rates also drive the result of NPV from each valuation for stakeholders. Therefore there would be a possibility to get conflicting recommendations from the IRR and NPV methods.

### **Project Structure Analysis**

In the case of this research, there are two parties involved (Landowner and Developer) would seek any financing possibility in the capital market to fulfill their objective in arranging this project. The portion of each party would be different from one to another. To achieve every parties objective:

1. The landowner do not have any capability but have land asset to become a collateral for any debt.
2. The developer tend to minimize debt in the company. Other than that have “brand name” and property developer know how.
3. Both are seeking for funding to finance some of capital required.

By considering these factors, the most appropriate arrangement to fulfil all stakeholder objectives is a partnership. The diagram of project structure is in the following figure 5.

Both sponsor (Developer and Land owner) will be merging together in the form of a joint venture, by using the new company as a special purpose vehicle. A form of project finance is the Special Purpose Company (SPC), which functions as a separate legal entity. The SPC is established in order to limit the involved organisations' responsibility in relation to the project. The project company's only mission is to run the specific project.

If it needed, other funding will be raised from special purpose financing vehicle to gather the crowdfunding. This financing vehicle would be settled outside Indonesia as there is no regulation in Indonesia to legalize the crowdfunding as of today. There are several crowdfunding platform in US or Europe or Australia that has accepted overseas project. The weakness in this case, however, is the arrangement is not like the pure crowdfunding schemes in countries with firm regulation. The tax to the investors is still treated like traditional income tax whereas in other countries, the crowdfunder can benefit from tax free option.

However both the project sponsors and investor still can relish other benefits of crowdfunding arrangement. Meanwhile to minimize the liquidity risk issue, The exit strategy is to sell to REITs/DIRE after the agreed lockup period.

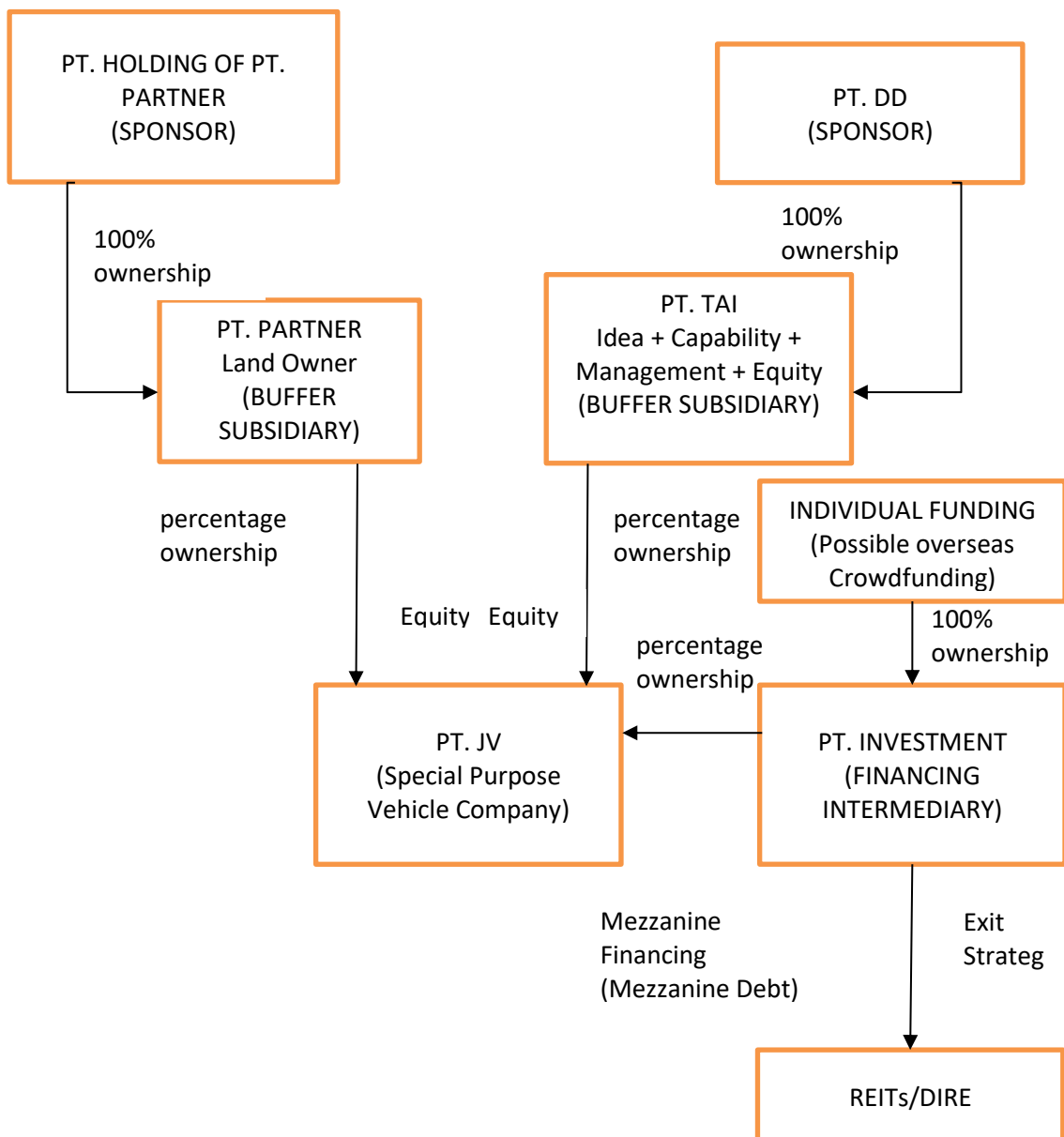


Figure 3. Project structure diagram

**Alternative of Business solution Analysis**

**Table 4. Option 1: Self Equity + Bank Loan**

CASE	OPTION 1	
Construction Cost (Include PPN)	Rp	633,650,495,535
TOTAL KEBUTUHAN DANA PROJECT	Rp	659,452,120,261
TOTAL DEBT (MASA KONSTRUKSI + OPERASIONAL)	Rp	295,166,027,198 45%
2016	Rp	220,451,788,841
2017	Rp	74,714,238,357
TOTAL EQUITY (MASA KONSTRUKSI + OPERASIONAL)	Rp	364,286,093,063 55%
2015	Rp	69,120,065,865
2016	Rp	220,451,788,841
2017	Rp	74,714,238,357
TOTAL CROWDFUNDING (MEZZANINE DEBT)		- 0%
<b>PROJECT's FCFF ANALYSIS</b>		
WACC		15.29%
NPV	Rp	204,672,760,410
IRR		20.25%
Payback Period		7.5
<b>JV's FCFE ANALYSIS</b>		
WACC		21.00%
NPV	Rp	32,611,750,661
IRR		22.32%
Payback Period		8.1
<b>DEVELOPER's FCFE ANALYSIS</b>		
NPV	Rp	51,905,473,511
IRR		23.29%
Payback Period		7.7
<b>LAND-OWNER's FCFE ANALYSIS (JEMUR)</b>		
NPV	Rp	(17,865,666,797)
IRR		4.29%
Payback Period		11.6
<b>LAND-OWNER's FCFE ANALYSIS (JOIN PROJECT)</b>		
NPV	Rp	22,783,607,329
IRR		22.32%
Payback Period		8.1
<b>CROWDFUNDER's FCFE ANALYSIS</b>		
NPV		-
IRR		-
Payback Period		-

From the summary above, obviously all the Free Cash Flow seems have a good result to continue the project. But this option required very high capital to invested and big liability in the future.

**Tabel 5. Option 2: full self equity**

CASE	OPTION 2	
<b>Construction Cost (Include PPN)</b>	Rp	633,650,495,535
<b>TOTAL KEBUTUHAN DANA PROJECT</b>	Rp	620,468,570,652
<b>TOTAL DEBT (MASA KONSTRUKSI + OPERASIONAL)</b>	Rp	- 0%
2016	Rp	-
2017	Rp	-
<b>TOTAL EQUITY (MASA KONSTRUKSI + OPERASIONAL)</b>	Rp	620,468,570,652 94%
2015	Rp	69,120,065,865
2016	Rp	429,899,248,204
2017	Rp	121,449,256,584
<b>TOTAL CROWDFUNDING (MEZZANINE DEBT)</b>		- 0%
<b>PROJECT's FCF ANALYSIS</b>		
WACC		21.00%
NPV	Rp	(22,886,768,266)
IRR		20.25%
Payback Period		7.5
<b>JV's FCFE ANALYSIS</b>		
WACC		21.00%
NPV	Rp	(22,886,768,266)
IRR		20.25%
Payback Period		7.5
<b>CIPUTRA's FCFE ANALYSIS</b>		
NPV	Rp	(174,636,056)
IRR		20.99%
Payback Period		7.2
<b>LAND-OWNER's FCFE ANALYSIS (JEMUR)</b>		
NPV	Rp	(17,631,527,642)
IRR		4.29%
Payback Period		11.6
<b>LAND-OWNER's FCFE ANALYSIS (JOIN PROJECT)</b>		
NPV	Rp	13,183,584,852
IRR		20.25%
Payback Period		7.5
<b>CROWDFUNDER's FCFE ANALYSIS</b>		
NPV		-
IRR		-
Payback Period		-

The sponsors definitely will not accept this arrangement. Other than that obviously the equity required is even bigger than the option 1. The NPV and IRR result also drives to the rejection. The only advantage of this option is the total cost required of this project will be relatively cheap while the overall shares of this project will be fully owned by the project company.

**Tabel 6. Option 3: Self equity + private equity**

CASE	OPTION 3	
Construction Cost (Include PPN)	Rp	633,650,495,535
TOTAL KEBUTUHAN DANA PROJECT	Rp	620,468,570,652
TOTAL DEBT (MASA KONSTRUKSI + OPERASIONAL)	Rp	- 0%
2016	Rp	-
2017	Rp	-
TOTAL EQUITY (MASA KONSTRUKSI + OPERASIONAL)	Rp	341,257,713,859 52%
2015	Rp	38,016,036,226
2016	Rp	236,444,586,512
2017	Rp	66,797,091,121
TOTAL CROWDFUNDING (MEZZANINE DEBT)		279,210,856,794 42%
<b>PROJECT's FCFF ANALYSIS</b>		
WACC		22.80%
NPV	Rp	(71,589,030,722)
IRR		20.25%
Payback Period		7.5
<b>JV's FCFE ANALYSIS</b>		
WACC		22.80%
NPV	Rp	(71,589,030,722)
IRR		20.25%
Payback Period		7.5
<b>DEVELOPER's FCFE ANALYSIS</b>		
NPV	Rp	10,088,564,474
IRR		21.65%
Payback Period		6.9
<b>LAND-OWNER's FCFE ANALYSIS (JEMUR)</b>		
NPV	Rp	(17,631,527,642)
IRR		4.29%
Payback Period		11.6
<b>LAND-OWNER's FCFE ANALYSIS (JOIN PROJECT)</b>		
NPV	Rp	12,720,021,812
IRR		20.25%
Payback Period		7.5
<b>CROWDFUNDER's FCFE ANALYSIS</b>		
NPV	Rp	128,913,094,976
IRR		35.95%
Payback Period		6.1

This option seems become the most expensive compare to the other option. As both capital sources are from equity side then the FCFE would be equal to FCFF. But both NPV shows negative amount and the IRR seems quite lower than the expected.

**Tabel 7. Option 4: Self equity + Mezzanine crowdfunding financing**

CASE	OPTION 4	
Construction Cost (Include PPN)	Rp	633,650,495,535
<b>TOTAL KEBUTUHAN DANA PROJECT</b>	Rp	<b>605,577,324,957</b>
<b>TOTAL DEBT (MASA KONSTRUKSI + OPERASIONAL)</b>	Rp	- 0%
2016	Rp	-
2017	Rp	-
<b>TOTAL EQUITY (MASA KONSTRUKSI + OPERASIONAL)</b>	Rp	<b>503,506,504,225 76%</b>
2015	Rp	55,710,773,087
2016	Rp	346,913,514,448
2017	Rp	100,882,216,691
<b>TOTAL CROWDFUNDING (MEZZANINE DEBT)</b>		<b>102,070,820,731 15%</b>
<b>PROJECT's FCFF ANALYSIS</b>		
WACC		19.07%
NPV	Rp	40,014,183,528
IRR		20.25%
Payback Period		7.5
<b>JV's FCFE ANALYSIS</b>		
WACC		19.07%
NPV	Rp	27,539,231,257
IRR		19.88%
Payback Period		7.7
<b>DEVELOPER's FCFE ANALYSIS</b>		
NPV	Rp	(4,693,199,043)
IRR		20.80%
Payback Period		7.3
<b>LAND-OWNER's FCFE ANALYSIS (JEMUR)</b>		
NPV	Rp	(14,714,552,083)
IRR		4.29%
Payback Period		11.6
<b>LAND-OWNER's FCFE ANALYSIS (JOIN PROJECT)</b>		
NPV	Rp	19,872,378,108
IRR		19.88%
Payback Period		7.7
<b>CROWDFUNDER's FCFE ANALYSIS</b>		
NPV	Rp	24,053,460,095
IRR		14.27%
Payback Period		6.4

From summary above, even the project need to pay 3% annual coupon to the investors. The total capital needed is the cheapest compare to other options. But the Developer's FCFE it shows negative NPV and IRR. It shows how this arrangement is not feasible for the Developer. So this option is not the best option to go with.

**Tabel 8. Option 5: Self equity + Bank loan + Mezzanine crowdfunding financing**

CASE	OPTION 5	
Construction Cost (Include PPN)	Rp	633,650,495,535
<b>TOTAL KEBUTUHAN DANA PROJECT</b>	Rp	<b>636,440,339,845</b>
<b>TOTAL DEBT (MASA KONSTRUKSI + OPERASIONAL)</b>	Rp	<b>295,166,027,198</b> 45%
2016	Rp	220,451,788,841
2017	Rp	74,714,238,357
<b>TOTAL EQUITY (MASA KONSTRUKSI + OPERASIONAL)</b>	Rp	<b>236,845,196,572</b> 36%
2015	Rp	48,639,876,692
2016	Rp	134,836,738,276
2017	Rp	53,368,581,604
<b>TOTAL CROWDFUNDING (MEZZANINE DEBT)</b>		<b>104,429,116,075</b> 16%
<b>PROJECT's FCFF ANALYSIS</b>		
WACC		13.93%
NPV	Rp	289,800,949,410
IRR		20.52%
Payback Period		7.4
<b>JV's FCFE ANALYSIS</b>		
WACC		18.60%
NPV	Rp	103,670,122,051
IRR		22.34%
Payback Period		8.1
<b>DEVELOPER's FCFE ANALYSIS</b>		
NPV	Rp	41,437,010,200
IRR		23.85%
Payback Period		7.6
<b>LAND-OWNER's FCFE ANALYSIS (JEMUR)</b>		
NPV	Rp	(17,903,041,453)
IRR		4.29%
Payback Period		11.6
<b>LAND-OWNER's FCFE ANALYSIS (JOIN PROJECT)</b>		
NPV	Rp	16,103,804,715
IRR		22.34%
Payback Period		8.1
<b>CROWDFUNDER's FCFE ANALYSIS</b>		
NPV	Rp	83,366,339,165
IRR		23.18%
Payback Period		6.2

This result is seems more satisfying. The NPV of project FCFF and FCFE for this option is the highest compared to the other scenarios. IRR of project FCFE also is the biggest. This good result also happened for other investor's valuation. With the lowest cost of capital this option is required low amount of initial capital.

**CONCLUSION AND SUGGESTION**

**Conclusion**

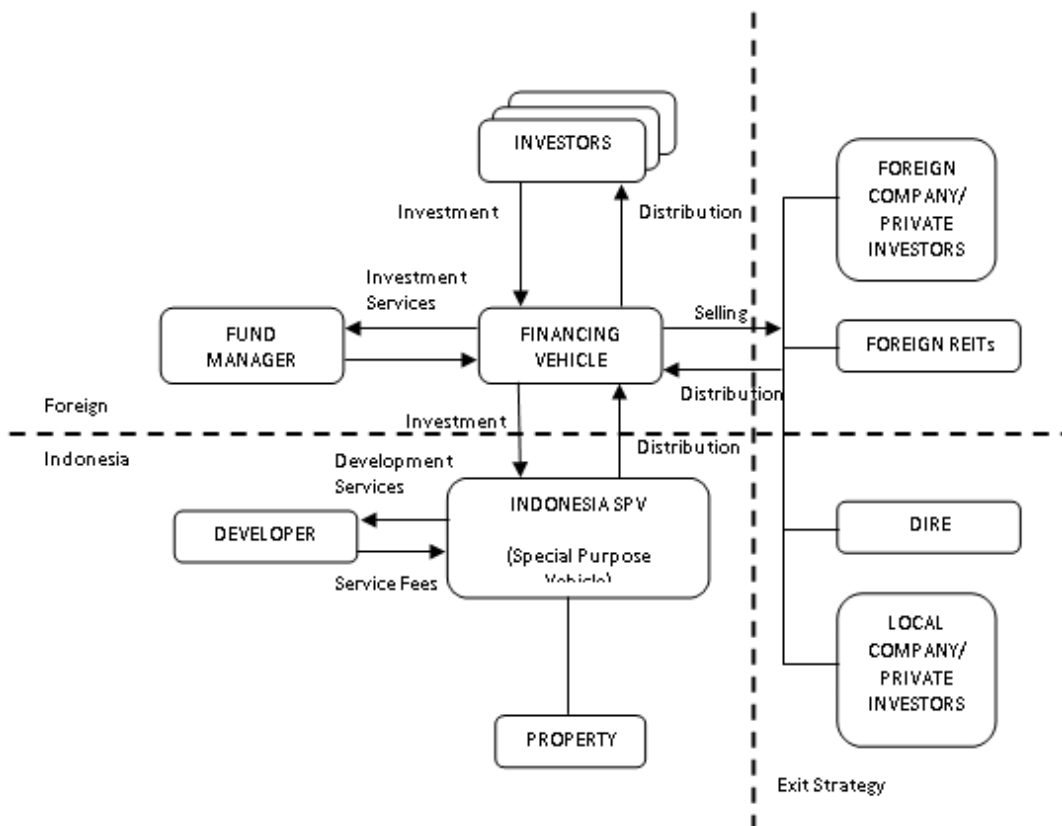
The recommendation was to apply crowdfunding method to get lower cost of capital. Because this crowdfunder is a small investors that would invest small module of investment and also expect reasonable smaller rate of return. The basic key-terms for the crowdfund is:

- Closed End Fund Size: Rp. 122.500.000.000,-
- Minimum Commitment: Rp. 400.000.000,-
- Lock Up: maximum 5 years (+3 years construction period)
- Expected Target Return: >20%
- Management Fee: 1% p.a.

In the analyzed in previous chapter for several alternative options, the author has concluded that by entering into a hybrid project arrangement for financing (self-equity, crowdfunding (mezzanine debt) and bank loan) the project profitability improved, benefitting all capital holders.

**Exit Strategy**

The primary exit strategy is for the fund to divest its interest in the project by executing a sale of shares in project company to an Indonesia real estate investment trust (DIRE) at market price when the lock-up period is ended. Besides the primary exit strategy aforementioned. The Fund Manager may also exit the investment by selling the shares to a foreign or local Indonesian company.



**Figure 4. Diagram of financing vehicle structure**



## Implementation Plan

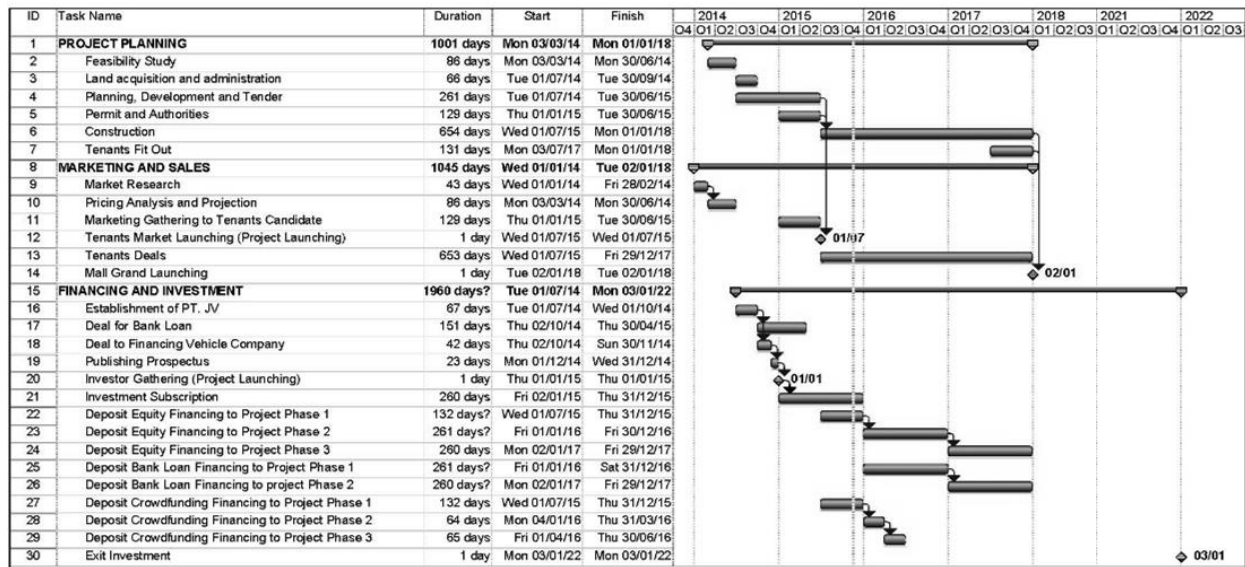


Figure 5. Schedule of Implementation

The implementation plan is divided by 3 main activities; Project Planning, Marketing and Financing and Investment. Some of the tasks need to be running together and some is a precedence to another. This means every division need to have integrated working process to get the best result of the project.

Project Planning is responsible for all the project planning process to the construction of the building. Total time duration would be at least 4 years (include the construction). KPI of this task is more to the cost control side. Marketing is the one will be determining the revenue performance of this project. The total time frame would be 4 years. It responsible for all sales and income capability of this project. Financing and Investment is the main concern of this research. It involve the negotiation with all shareholders, investors and lenders of this project. Total duration would be 3.5 years with over-all 7 years for the lock-up period of investment.

## REFERENCES

- Anthony Zeoli, *Top 3 Differences Between Real Estate Crowdfunding and REITs*. (2015, August 21). Retrieved From: [www.timesrealtynews.com](http://www.timesrealtynews.com)
- Crowdfund Insider, Equity vs Debt Crowdfunding*. (2014, August 20). Retrieved From: [www.crowdfuninsider.com](http://www.crowdfuninsider.com)
- European Commission (carried out by: SpaceTec Capital Partners) *Final Report*. (2014). Crowdfunding Innovative Ventures in Europe.
- Finnerty, J. (2007). *Project financing: asset-based financial engineering* (2 ed.). New Jersey, NJ: John Wiley & Sons, Inc.
- Fundrise, *Mezzanine Debt vs Preferred Equity*. (2015, August 20). Retrieved From: [www.fundrise.com](http://www.fundrise.com)
- Ge, Y. (2010). American commercial real estate financing and the effect on economy. *Shanghai Finance*. 3, p 60-62.
- Global Business Guide, Indonesia. (2014, August 10). *Indonesia's retail boom is far from over*. Retrieved From:

[http://www.gbgingonesia.com/en/services/article/2014/indonesia\\_s\\_retail\\_boom\\_is\\_far\\_from\\_over.php](http://www.gbgingonesia.com/en/services/article/2014/indonesia_s_retail_boom_is_far_from_over.php)

Liu, M. (2011). *Financing alternatives for small real estate developers in China: a case study of Guangzhou* (Master's thesis). KTH Architecture and the Built Environment.

*Peer Realty, How Real estate Crowdfunding Differs From REITs*, 2015. (2015, August 21). Retrieved From: [www.peerrealty.com](http://www.peerrealty.com)

*Scope Ratings Special Report 2015. European Real Estate Debt Funds*. (2015, August 21). Retrieved From: [www.scoperatings.com](http://www.scoperatings.com)

Wyman, O. (2013). *Unlocking funding for european investment and growth*. Association for Financial Markets in Europe.