

The sustainability of the PTPTN loan scheme

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1.0 Executive Summary

The National Higher Education Fund Corporation, better known by its Bahasa Malaysia acronym PTPTN (which stands for *Perbadanan Tabung Pendidikan Tinggi Nasional*), has made national headlines in the past few years for the low repayment rates of its loan takers. These low repayment rates have exerted significant financial pressure on the corporation, forcing it to take drastic measures such as blacklisting negligent loan takers and preventing them from going overseas.

The potential impact of PTPTN's financial position to the federal government can be seen in the large amount of loans which have been disbursed. Cumulatively, over RM55 billion worth of loans were approved at the end of 2015. The demand for PTPTN loans is expected to continue rising especially with the increase in higher education enrolment figures. Moreover, with the projected higher increase in the number of local students attending more private higher education institutions (IPTA²) which charge higher fees compared to public higher education institutions (IPTS)³, the yearly loan burden of PTPTN, currently at RM4 billion a year, will increase significantly.⁴

Of the RM15.33 billion worth of PTPTN loans that were due for repayment at the end of 2015, less than half (46.6%) or RM7.14 billion has been repaid. This has placed tremendous strain on PTPTN's finances, as it is forced to seek new funding channels from the market through bank loans and sukuk bonds to make new loans. The interest servicing costs for PTPTN reached a high of RM1.519 billion in 2015. If not for the government's assistance through grants totalling RM6.456 billion from 2011 to 2015, the total accumulated financial losses for PTPTN would have amounted to RM5.894 billion.

From 2015 onwards, the government bore the costs of PTPTN discounts and waiver of 1st class honours PTPTN loans. The accumulated costs of 1st class honours waivers reached RM841.57 million at the end of 2015. In 2015 alone, the cost of 1st class honours waivers was RM131.5 million while the costs of PTPTN discounts worth 20% and 10% was RM123.5 million.⁵ As the number of students eligible for the 1st class honours waivers increases, (especially those in IPTS), the cost of the 1st class honours waivers will increase

² Institut Pengajian Tinggi Awam (IPTA) refer to Public Higher Education Institutions.

³ Institut Pengajian Tinggi Swasta (IPTS) refer to Private Higher Education Institutions.

⁴ <http://www.malaysiandigest.com/news/629467-ptptn-loan-cut-50-000-students-could-lose-out-on-benefits-due-to-poor-repayment.html>

⁵ 2015 PTPTN Annual Report.

commensurately. Likewise, the larger the number of PTPTN loan holder students, the greater the incidence rates of those who take advantage of the PTPTN discounts, with a corresponding cost to the government.

There are various reasons contributing to the phenomenon of low PTPTN loan repayment rates. Prevailing nonchalance towards repaying loans is a major factor, but rising unemployment and underemployment rates faced by graduates as they enter the job market could also be contributing factors.

Though PTPTN has introduced several initiatives to improve its financial position, such as creating mandatory savings schemes for PTPTN loan holders (or their parents); using one's EPF to repay back PTPTN loans; reducing the maximum loan amount for IPTA and IPTS, and imposing an "overseas travel blacklist" on negligent loan takers, it is unclear if these initiatives are effective in increasing repayment rates and lessening financial pressures.

If the challenges faced by PTPTN continue unabated, the cost of 'bailing out' PTPTN could reach RM3.2 billion yearly by 2025. The cumulative cost of 'bailing out' PTPTN could reach RM26 billion for the time-period 2015-2025.

To find more effective remedies, PTPTN should carry out comprehensive survey of loan takers. Besides gaining a better understanding of the reasons behind the poor repayment rates, this data gathering exercise will also enable PTPTN to fine tune its strategies with regards to improving loan repayment rates. This could mean more stringent means testing, charging variable interest rates according to socio-economic status of the loan holders, introducing income contingent loan repayments and reducing the amount of 1st class waivers and discounts.

Holistically speaking, a relook at the Malaysian Higher Education Blueprint is warranted to see if the model of aggressive expansion in the student intake for IPTS is sustainable and/or desirable. Are students getting their value for money by enrolling in IPTS? How is this impacting their ability to service their PTPTN loans? Are IPTA increasingly being short changed especially from a funding perspective? The state of Malaysia's Higher Education sector has been hotly debated, and PTPTN's problems should catalyze further discussion around this subject. If nothing is done, PTPTN's loan obligations will continue to tick on like a financial time bomb, with severe consequences when it finally explodes.

2.0 Introduction

Student loans have become an important part of the global higher education landscape, in tandem with an increased demand for tertiary education. Student loans increase access to higher education for students from poorer backgrounds, by enabling them to pay for their university / college education. Typically, the loan repayment is deferred until the student is financially capable of doing so (i.e. when he/she graduates and enters the workforce). As of 2008, a total of 70 countries had government sponsored student loan schemes⁶. Two common trends emerged amongst these countries. The first was a steadily rising level of student debt. At the point of writing, the infamous student loan debt clock in the U.S had exceeded US\$1.3 trillion.⁷ Meanwhile, in the United Kingdom, the introduction of university tuition fees in 1998 and subsequent fee hikes also led to a significant increase in student loans. The average student loan per annum increased from \$390 in 1990 to an estimated \$12,330 in 2015, while total student loans are estimated to cross the £100-billion-pound mark by 2018.⁸ Given these statistics, it seems that the student debt crisis is becoming increasingly problematic worldwide.

Another common trend observed among governments that sponsored student loans was the highly subsidized nature of loans, and the widening gap between the amount of loans issued and the amount received return. This gap is caused by “built-in interest rate subsidies, incorporated into the design of the loans scheme.... [and] inefficiencies in running the scheme, in terms of substantial repayment default and high administration costs.”⁹ In Malaysia, student debt is also on the rise, caused in part by an increasing intake rate among private universities and colleges, as well as the rising rate of loan defaulters. This has put considerable financial strain on the government’s student loan scheme. As of 2015, Malaysia’s student debt repayment rate hovered below 50%, with approximately RM8 billion worth of unpaid loans. Out of the 70 countries, Malaysia figures prominently as one that distributes loans to students and suffers from a low repayment rate.¹⁰ Numerous writers have commented on this issue

⁶ Shen, H., & Ziderman, A. (2009). Student loans repayment and recovery: international comparisons. *Higher education*, 57(3), 315-333.

⁷ <http://www.finaid.org/loans/studentloandebtclock.phtml>

⁸ Student Loan Statics Briefing Paper by Paul Bolton, 17th October 2016

<http://researchbriefings.files.parliament.uk/documents/SN01079/SN01079.pdf>

⁹ Shen & Ziderman (2009), pg.316

¹⁰ Ismail, S., Serguieva, A., & Singh, S. (2011). Integrative model of students' attitude to educational loan repayment: A structural modelling approach. *Journal of International Education in Business*, 4(2), pg.126; Albertcht, D. & Ziderman, A. (1991), Deferred Cost Recovery for Higher Education: Student Loan Program in Developing Countries. Washington, DC: World Bank Discussion Paper 137.

since the early 2000s.¹¹ It is important to examine the operations of the student loan system in Malaysia as it directly affects access to tertiary education, and indirectly impacts the country's overall economic health.

This study attempts to answer the following questions: (i) What are the causes of the low repayment rates for the PTPTN loans? (ii) What is the projected financial trajectory of the PTPTN fund? (iii) What impact does the PTPTN fund have on the national budget and (iv) What are some possible reforms to the PTPTN loan scheme that can be introduced to solve its current financial problems?

3.0 A brief history of PTPTN and a funding shift towards Private Higher Education Institutions (IPTS)

In 1997, the Malaysian government, via an act of parliament, formed the National Higher Educational Fund Corporation (NHEFC), also known as *Perbadanan Tabung Pendidikan Tinggi Nasional* (PTPTN) as a semi-autonomous agency under the Ministry of Higher Education (MOHE). PTPTN was tasked with the responsibility of distributing and administering educational loans to help poorer students finance their higher education in terms of tuition fees and living costs. The PTPTN loan is made available to students pursuing studies at all local public and private universities, as well as polytechnics. Students pursuing their diploma, first degree, master, doctorate or professional courses are eligible to apply for these loans. Between 1997 and 2015, 2,464,937 loans with a value of approximately RM55.83 billion were approved for students pursuing their higher education studies in Malaysia.¹²

Though the PTPTN loans were originally intended to aid those students in public higher education institutions (IPTA), there has been a sharp increase of loans provided to students from private higher education institutions (IPTS) over the years (see Table 1). In 1996, the Malaysian government began to officially recognise loan requests from students studying in IPTS largely because of the IPTS' ability to meet excess demand for higher education, something that the IPTA could not fulfil.

¹¹<http://www.malaysiakini.com/news/33756> and <http://www.malaysiakini.com/letters/33815>

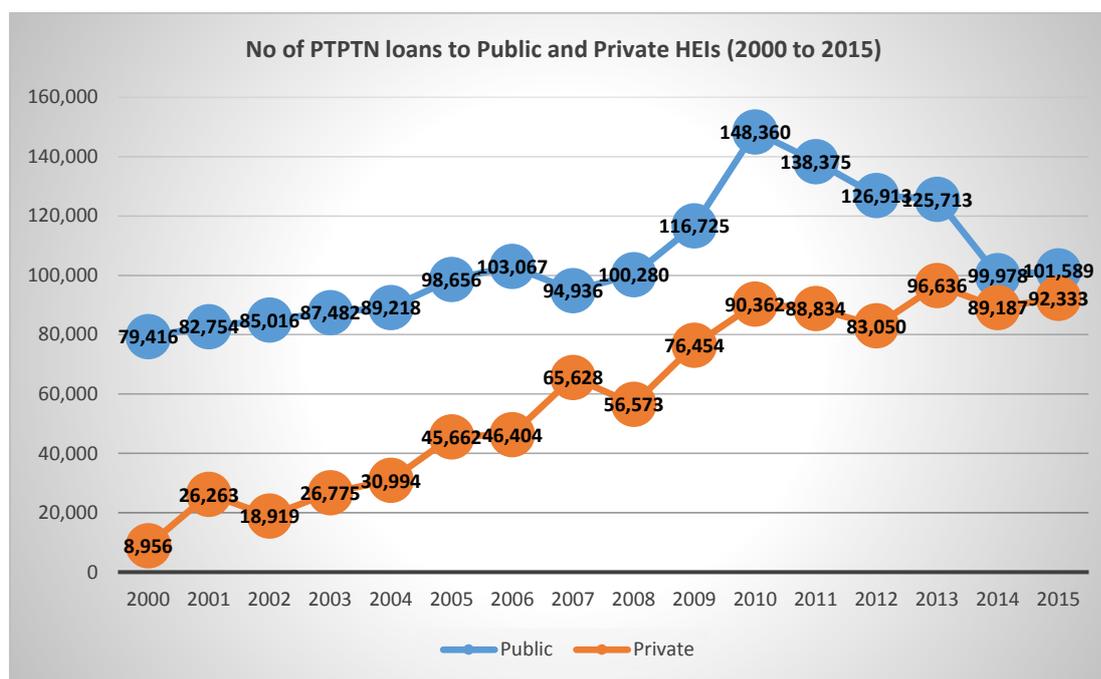
¹² 2015 PTPTN Annual Report

Table 1: Total Loans Approved for Students in IPTA and IPTS. 2000–2015 ¹³

Year of Approval	Public Higher Education Institutions	Private Higher Education Institutions	Total
2000	79,416 (89.8%)	8,956 (10.2%)	88,372
2001	82,754 (75.9%)	26,263 (24.1%)	109,017
2002	85,016 (81.8%)	18,919 (18.2%)	103,935
2003	87,482 (76.6%)	26,775 (23.4%)	114,257
2004	89,218 (74.2%)	30,994 (25.8%)	120,212
2005	98,656 (68.4%)	45,662 (31.6%)	144,318
2006	103,067 (69%)	46,404 (31%)	149,471
2007	94,936 (59%)	65,628 (41%)	160,564
2008	100,280 (64%)	56,573 (36%)	156,853
2009	116,725 (60%)	76,454 (40%)	193,179
2010	148,360 (62.1%)	90,362 (37.9%)	238,722
2011	138,375 (60.9%)	88,834 (39.1%)	227,209
2012	126,913 (60.4%)	83,050 (39.6%)	209,963
2013	125,713 (56.5%)	96,636 (43.5%)	222,349
2014	99,978 (52.9%)	89,187 (47.1%)	189,165
2015	101,589 (52.4%)	92,333 (47.6%)	193,922

Source: Info PTPTN 2011, PTPTN Annual Reports 2012 to 2015

Figure 1: Total Loans Approved for Students in IPTA and IPTS, 2000–2015



Source: Source: Information PTPTN 2011, PTPTN Annual Reports 2012 to 2015 and Tham (2011)¹⁴

¹³Compiled from Tham 2011, pg. 9 and PTPTN Annual Report 2012, 2013, 2014 and 2015 (Breakdown between Public and Private Higher Education Institutions from 1997 to 1999 not available). The approved loan figures are not consistent across Annual Reports. For example, the 2014 PTPTN Annual Report shows that a total of 189,165 loans were approved in 2014 but the 2015 PTPTN Annual Report shows a total of 207,458 loans were approved in 2014. For the sake of consistency, the figures from the annual report for that year was used i.e. the figure from the 2014 PTPTN Annual Report for total loans approved in 2014 was used rather than the figure in the 2015 PTPTN Annual Report.

¹⁴ Tham, S. Y. (2011). *Exploring Access and Equity in Malaysia's Private Higher Education* (No. 280). Asian Development Bank Institute.

Table 1 and Figure 1 show the total volume of loans approved for students enrolled in Malaysian public and private universities from 2000 to 2015. IPTS approved loans represented a small fraction of the total volume of loans approved during the initial years of PTPTN's implementation (a mere 10.2% in 2000). However, the number of loans going towards IPTS increased over the years, culminating in the highest ever percentage of loans given to IPTS in 2015 (47.6% of total loans). With the number of IPTS students projected to overtake the number of IPTA students, it is likely that the number of loans for IPTS students will overtake the loans for PuHEIs in the very near future.¹⁵

Besides studying the volume of loans administered to students enrolled in PrHEIs and PuHEIs, it is also useful to compare the total amount of PTPTN's financial resources that go towards supporting students in both private and public sector education.

Table 2: Total Amount of Loans Approved for IPTA & IPTS, 1997-2015¹⁶

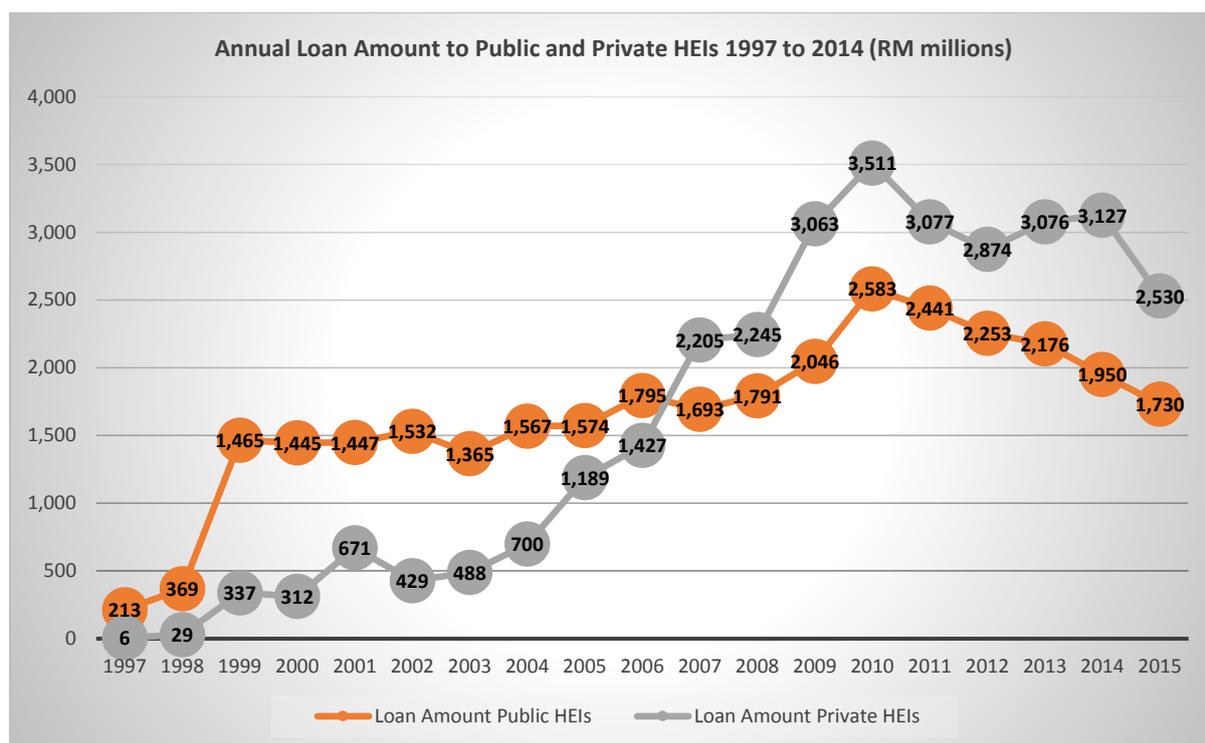
Year	Public HEIs (millions)	Private HEIs (millions)	Total (millions)	Public HEIs (%)	Private HEIs (%)
1997	212.6	6.5	219.0	97.0%	3.0%
1998	369.4	29.1	398.5	92.7%	7.3%
1999	1,465.4	337.1	1,802.5	81.3%	18.7%
2000	1,445.4	311.6	1,757.0	82.3%	17.7%
2001	1,447.1	671.1	2,118.2	68.3%	31.7%
2002	1,531.6	428.6	1,960.3	78.1%	21.9%
2003	1,365.2	487.9	1,853.1	73.7%	26.3%
2004	1,567.4	699.8	2,267.2	69.1%	30.9%
2005	1,573.5	1,189.5	2,763.0	56.9%	43.1%
2006	1,795.2	1,426.5	3,221.7	55.7%	44.3%
2007	1,692.9	2,204.5	3,897.4	43.4%	56.6%
2008	1,791.2	2,244.6	4,035.9	44.4%	55.6%
2009	2,046.3	3,063.2	5,109.5	40.0%	60.0%
2010	2,582.8	3,510.7	6,093.5	42.4%	57.6%
2011	2,441.1	3,077.1	5,518.3	44.2%	55.8%
2012	2,253.2	2,874.0	5,127.2	43.9%	56.1%
2013	2,176.0	3,076.2	5,252.2	41.4%	58.6%
2014	1,949.8	3,126.5	5,076.3	38.4%	61.6%
2015	1730.0	2530.0	4,260.0	40.6%	59.4%

Source: Info PTPTN 2011, PTPTN Annual Reports 2012 to 2015

¹⁵ Malaysia Education Blueprint (Higher Education) 2013-2025, pg.E-8

¹⁶ PTPTN Annual Report 2012, 2013, 2014, 2015 & Info PTPTN (<http://www.ptptn.gov.my/docs/Penerbitan-PTPTN/Info%20PTPTN%202011.pdf>). Also see Note 9.

Figure 2: Amount of Loans Approved to PuHEIs and PrHEIs, 1997-2015¹⁷



Source: Info PTPTN 2011, PTPTN Annual Reports 2012 to 2015

Table 2 and Figure 2 show that IPTS approved student loans are disproportionately larger, and thus take on a larger percentage of PTPTN’s financial budget compared to loans given to students enrolled in IPTA. Even though the number of IPTS loan recipients accounts for approximately 30% of the total loan distribution from 2000-2015, the total amount of money disbursed to IPTS students is 48% of the overall budget¹⁸ and this figure is growing annually. PTPTN allocates a larger loan sum to students in private institutions as most IPTS impose a higher tuition fee than their public counterparts.¹⁹ Hence, although the volume of loans approved for PrHEIs may not exceed that of the PuHEIs, the actual amount of money disbursed to private students has outstripped that of students in public universities for many years. The share of financial resources going towards students at PrHEIs has increased every year from 2011-2015, peaking at 61.6% in 2014 before falling slightly to 59.4% in 2015. The share of loans going to PrHEIs is expected to increase further based on current projections outlined in the Malaysia Education Blueprint Higher Education 2015-2025.

¹⁷ Ibid

¹⁸ PTPTN Annual Report 2013, pg. 27

¹⁹Tham 2011,pg. 13

4.0 Current Financial Position of PTPTN

If PTPTN's underlying finances were healthy and in good shape, the growth of loans would not be a concern. But this has not been the case. According to the PTPTN Annual Reports from 2011 to 2015, the agency had been making profits from 2011 to 2015 (RM18m, RM12m, RM21m, RM109 and RM401m in 2011, 2012, 2013, 2014 and 2015 respectively).

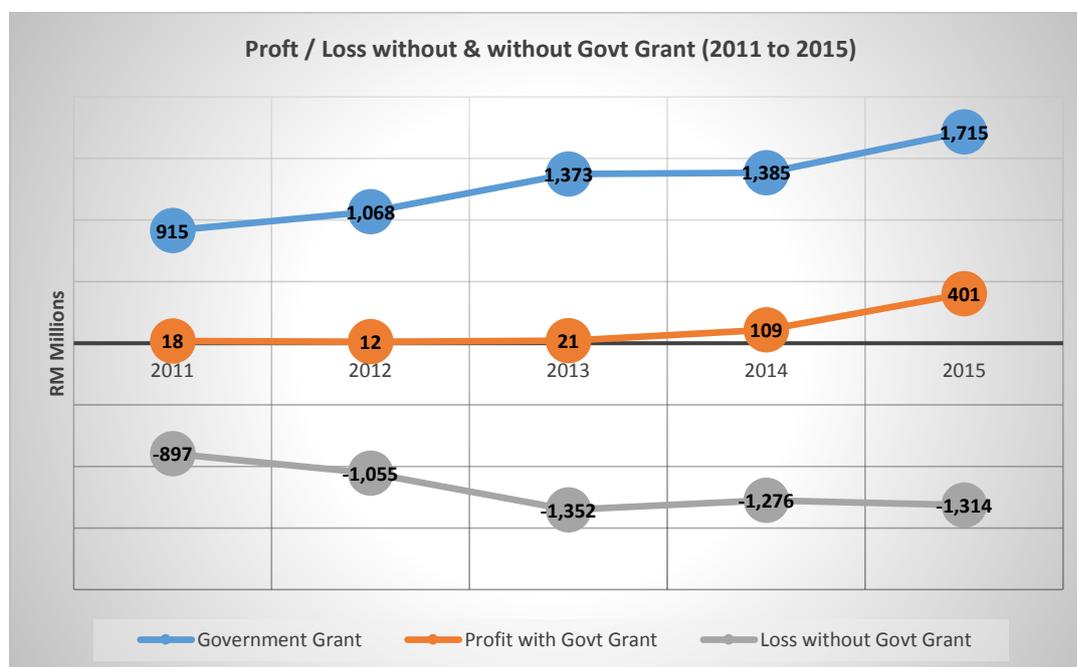
Though seemingly encouraging, these positive profits mask underlying financial challenges. In reality, PTPTN was only able to make these profits due to substantial annual government grants, totalling RM6.456 billion from 2011 to 2015. Without the injection of financial support from the government, PTPTN would have suffered losses totalling RM5.894 billion from 2011 to 2015.²⁰ (See Table 3 and Figure 3 below)

Table 3: Financial Position of PTPTN 2011 to 2014

Item (RM million)	2011	2012	2013	2014	2015
Revenue	1,168	1,389	1,832	1,865	2,412
Government Grant	915	1,068	1,373	1,385	1,715
Government Grant as % of Revenue	78.3%	76.9%	74.9%	74.3%	71.1%
Profits / Loss	18	12	21	109	401
Expenses	1,150	1,376	1,811	1,756	2,011
Interest Payments	937	1,051	1,256	1,381	1,519
Interest Payments as % of Expenses	81.5%	76.4%	69.3%	78.6%	75.5%
Profits / Loss without Govt Grant	(897)	(1,056)	(1,352)	(1,276)	(1,314)

Source: PTPTN Annual Reports, 2012 to 2015

Figure 3: Profit / Loss of PTPTN with and without government grants



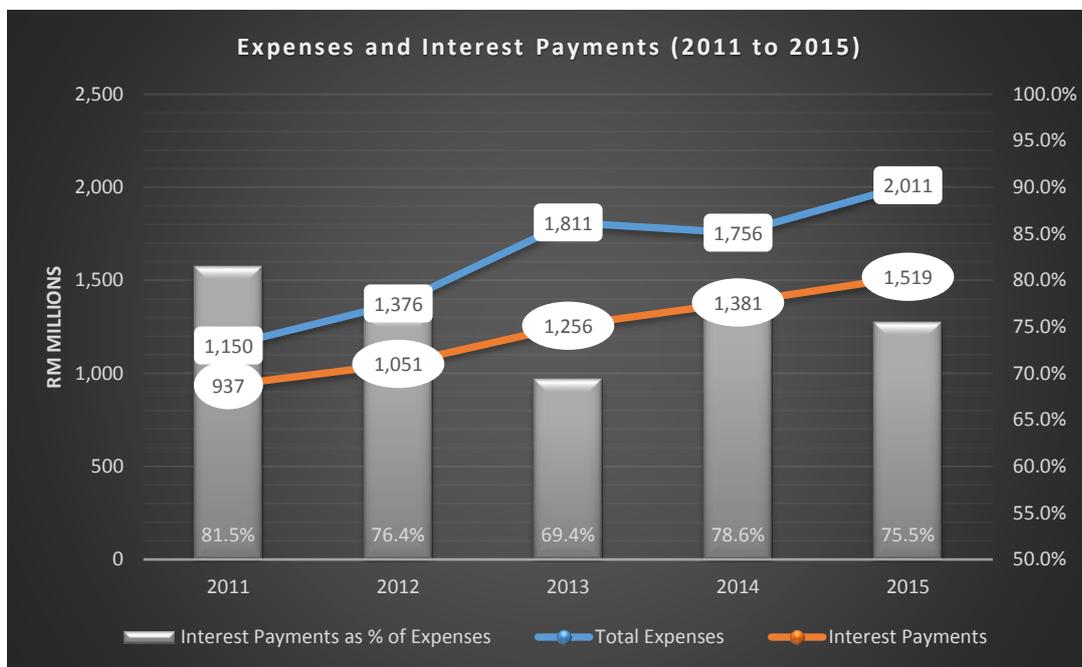
Source: PTPTN Annual Reports, 2012 to 2015

²⁰ PTPTN Annual Reports are not available on the PTPTN website. They are tabled in parliament every year because PTPTN is a statutory body.

The amount of government grants has almost doubled from RM915 million in 2011 to RM1.715 billion in 2015, suggesting an over-reliance on government aid to cover its cost of operations.

This raises concerns on the strength of PTPTN’s loan scheme mechanism. Depending on government aid and borrowed funds in order to fund new loans is not financially sustainable in the long term. If low repayment rates continued unabated, this will lead to higher interest servicing costs and exacerbate PTPTN’s financial difficulties. To give a picture, interest servicing costs as a percentage of total expenses reached a high of 81.5% in 2011 before coming down to 75.5% in 2015. Interest servicing costs reached a high of RM1.519 billion in (Figure 4 below).

Figure 4: Expenses and Interest Payments for PTPTN (2011 to 2015)



Source: PTPTN Annual Reports, 2012 to 2015

PTPTN’s financial problems boil down to several factors namely (i) the low repayment rates by borrowers (ii) the cost of first class honours waivers and (ii) the cost of discounts for accelerated loan repayments. Out of all these, low debt servicing rates is by far the most debilitating issue.

5.0 Explanations for PTPTN's financial position

5.1 Problems in the loan repayment rate

From 1997 (when it was formed) to 31st December 2015, PTPTN has approved more than RM55 billion worth of loans to approximately 2.5 million students in both public and private institutions (See Tables 1 and 2 above).

In order for the PTPTN loan scheme to be financially sustainable, student borrowers must repay their loans so that the principal and interest may be used to channel more loans to incoming students. Table 4 below shows the total amount of loans disbursed from 1997 to 2015 and the amounts repaid for each year within the same period.²¹ Students typically start repaying their loans six months after they graduate or when they get a job, whichever is earlier.

Based on the findings, there is a distinct lag between the amount of loans disbursed and amounts repaid. Assuming all other extenuating circumstances do not change, if the number of students applying for loans continues to increase, PTPTN would have to source for additional funding as yearly trends show that the levels of repayment are too low to cover the loans disbursed. In other words, if borrowers continue to perpetuate low repayment rates, PTPTN would be forced to borrow more from banks or from the market (via bond issuance) or depend on the government for more grants. More recently, PTPTN has turned to taking own deposits from savers via SSPN-I savings accounts (more on this later) to use these funds to lend to students.

Table 4: Amounts disbursed by and paid to PTPTN, 1997 to 2015

Year	Total loan disbursed in (RM million)	Amounts repaid in (RM million)
1997	0	0
1998	161	0
1999	581	0
2000	913	3
2001	771	5
2002	1990	9
2003	1883	34
2004	1618	44
2005	1837	97
2006	2275	193
2007	2694	295
2008	2968	347
2009	3326	554
2010	3862	638

²¹ The loans disbursed in Table 4 is less than the loans approved in Table 2 because not all of the loans approved are disbursed.

2011	4570	963
2012	4304	801
2013	4178	1212
2014	4072	717
2015	3840	1444
Total	45845	7356

Source: Info PTPTN 2011, PTPTN Annual Reports 2012 to 2015

Lately, numerous reports circulating in the press and on social media have addressed the issue of how students are unwilling and in some cases, unable to service their PTPTN loans.²² Yet the issue of low repayment rates has been around for quite some time. According to figures from the 2012 to 2015 annual reports, the accumulated repayment rate, which, at 54.6% in 2011, was not high to begin with, had dipped to 45% in 2014, increasing only slightly to 46.6% in 2015 (See Table 5 below).

Table 5: Rate of Collection for PTPTN 2011-2015

Year	Should be collected (RM million)	Has been collected back (RM million)	Percentage collected (%)
2011	5,414.4	2,956.7	54.6
2012	7,710.6	3,757.2	48.7
2013	10,080.7	4,969.0	49.3
2014	12,635.2	5,685.6	45.0
2015	15,630.0	7,140.0	46.6

Source: 2012 to 2015 PTPTN Annual Report

Table 5 shows that in 2015, a total of RM15.63 billion in repayments were due. Instead, only a total of RM7.14 billion was collected (or 46.6% of the total).

What are the reasons for students being unwilling or unable to service their PTPTN loans? A 2012 student debt survey²³ found that graduates tend to have a lackadaisical attitude towards student debts, choosing instead to prioritize their other debt burdens. Among the respondents, those graduates who had yet to repay back their loans cited several reasons for their negligence, including insufficient income, inconvenient repayment process and unemployment. And while cultural reasons may be one reason,²⁴ it is equally important to consider the institutional and structural issues contributing to high loan default rates. While students had adequate knowledge about PTPTN loans, another study found that many

²² See <http://www.thestar.com.my/news/nation/2015/08/20/ptptn-defaulters-tell-why-they-are-not-paying-up/> as an example.

²³ Full survey can be found in Zainal, N. R., & Ismail, N. (2012). Debt Composition and Attitude towards Education Loan among Malaysian Graduates. *Procedia-Social and Behavioral Sciences*, 36, 280-286.

²⁴ An example is Ismail, Katan and Omar (2015) studied the attitudes and perceptions on educational loan repayment amongst Malay Muslims in Malaysia

viewed loan repayment negatively as they felt that it would restrict their life choices upon graduation.²⁵

In a 2015 study commissioned by PTPTN involving 200 respondents, the following were identified as the 5 major reasons for non-servicing of PTPTN loans: ²⁶: (i) high living costs (ii) insufficient income (iii) uncertain unemployment status (iv) high administration costs (v) employment which did not match individual qualifications. (break down not available)

39% of respondents were of the impression that PTPTN would receive government support if the borrowers did not repay their loans, though almost all respondents agreed that from a moral perspective, the loans should be repaid.

PTPTN's stipulated monthly payments are not all that prohibitive, considering the low interest rates. For example, a loan of RM10,000 with an interest rate of 1% (ujrah rate) and a 120 month/ 10 year repayment period would work out to a monthly payment of approximately RM92 per month.²⁷

In some cases, borrowers may even negotiate with PTPTN to lower their monthly interest payments and so ease the burden of servicing loans, such as restructuring their loans and, in special circumstances, to postpone the start of the loan repayment period.

For example, a borrower is able to convert a conventional loan with an interest rate of 3% to an ujah loan with an interest rate of 1% in order to lower the monthly interest payment.²⁸ Borrowers are also able to restructure their loan repayment period to extend up until the borrower is 60 years of age.²⁹ The only shortcoming of these schemes, from the borrower's perspective, is that 50% of the total loan amount must be repaid before the loan can be converted or restructured.

Under special conditions, such as embarking on further studies, undergoing training programmes or facing unemployment, the borrower can also defer the start of the repayment period.³⁰

Rising levels of graduate unemployment and underemployment are also an important factor contributing to PTPTN's low repayment rates. According to statistics from the 2015 Labour Force Survey, the unemployment rate among those with tertiary level qualifications

²⁵ Bakar, Masud & Jusoh (2006) Found at <http://link.springer.com/article/10.1007/s10834-006-9035-6>

²⁶ 2015 PTPTN Annual Report, pg.48

²⁷ <http://www.ptptn.gov.my/web/english/ujrah-calculator>

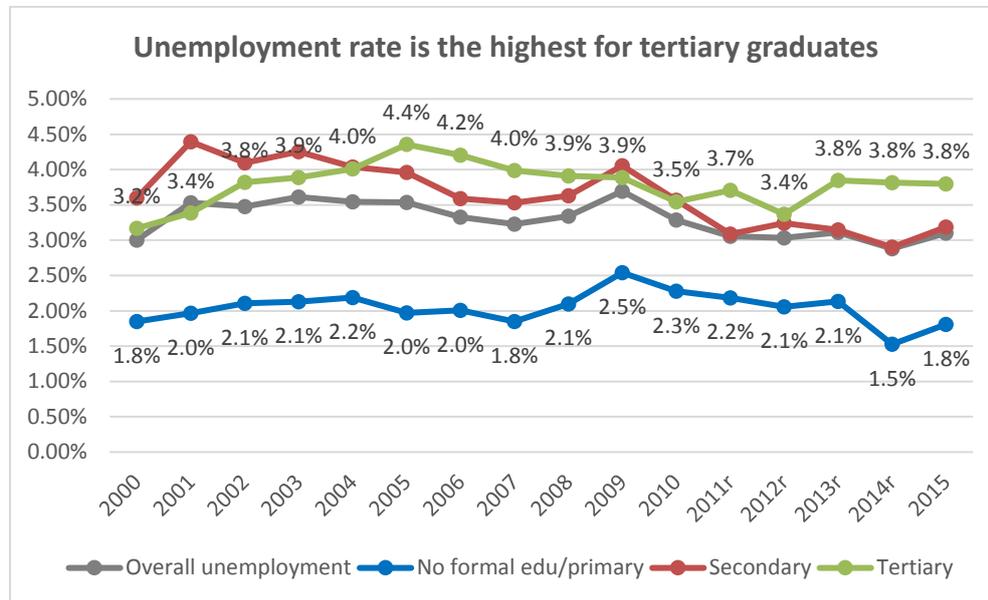
²⁸ <http://www.ptptn.gov.my/web/english/offer-and-application>

²⁹ <http://www.ptptn.gov.my/web/guest/penjadualan-dan-penstrukturaran-semula-pembiayaan>

³⁰ <http://www.ptptn.gov.my/web/english/deferment-of-repayment>

(3.8%) is higher than those with secondary level qualifications (3.1%) and those with no formal qualifications (1.8%) (See Figure 5 below). One reason could be because graduates are more particular about selecting jobs that match their qualifications compared to non-graduates.³¹

Figure 5: Unemployment Rate by Education Level (2000 to 2015)

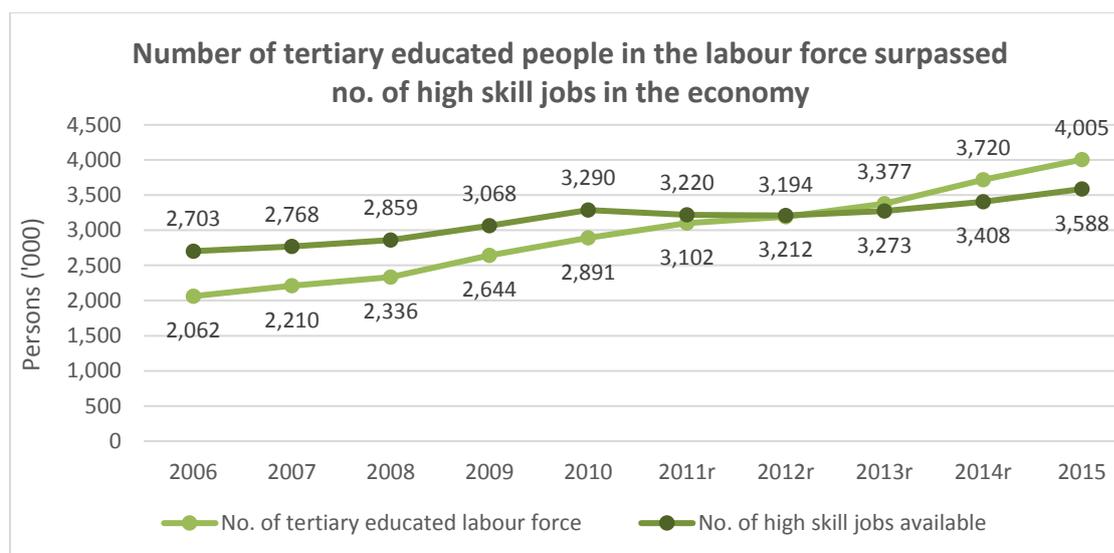


Source: DOSM, LFS Time Series

Figure 6 below shows the growing gap between the number of high-skill jobs in the economy and the supply of tertiary graduates from 2006 to 2015. In 2006, 2.7 million persons were employed as managers, professionals or technicians, whereas the tertiary educated labour force numbered 2.1 million. This suggests that those who did not possess university credentials were still able to compete for high-skill jobs alongside skilled labour. However, from 2012 onwards, the rising numbers of university graduates increased competition for high-skill employment in the economy. In 2015, the number of tertiary educated workers rose to 4 million, but only approximately 3.6 million high skilled jobs were available in the economy.

³¹ The Sun (2015). Graduates 'too choosy and lack confidence' remain unemployed. Published 9 May, 2015. <http://www.thesundaily.my/news/1413049> (Last accessed 9 December 2016)

Figure 6: Number of tertiary educated workers & high skill jobs (2006 to 2015)



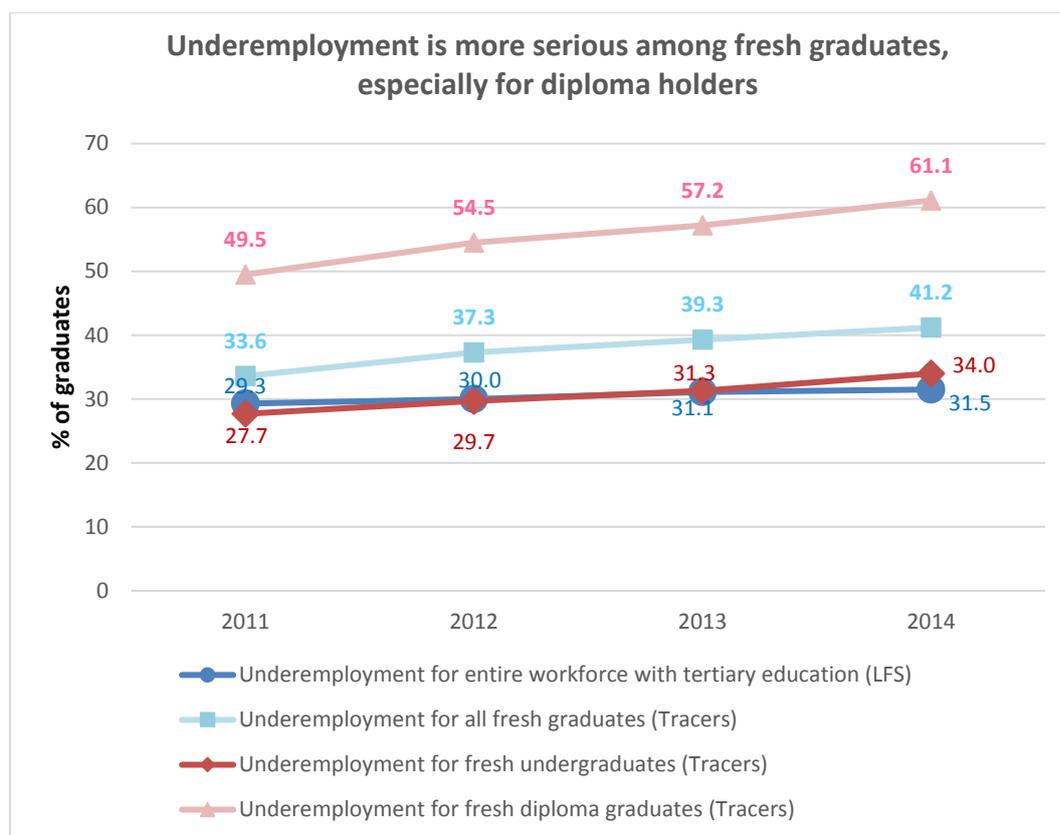
Source: DOSM, LFS Time Series

Aside from unemployment, many graduates are underemployed, i.e. working in jobs that do not make full use of their skills and abilities. Figure 7 presents the proportion of tertiary graduates working in mid or low-skill occupations using data from the Labour Force Survey (LFS) and the Tracer studies. The LFS depicts underemployment³² for all tertiary graduates while the Tracer studies presents underemployment specifically for fresh graduates. Underemployment especially plagues diploma holders; from 2012 onwards, over 50% of new diploma graduates accepted mid-low skill jobs which typically did not require a university level education (for example, clerical support roles). By contrast, the proportion of underemployed fresh degree holders hovered below 50% as of 2014. Nevertheless, the numbers of 'overqualified' employed graduates is rapidly increasing. Based on the data available, more are entering sales and services occupations that generally only require high-school training (Minister of Higher Education, 2015, pg.66).³³

³² Number of tertiary educated persons employed in occupations that are not included in the high-skill group, i.e. (managers, professionals, associated professionals and technicians) / total number of tertiary educated employed persons.

³³ Minister of Higher Education (2015) *Laporan Kajian Pengesahan Graduan 2014*, Putrajaya.

Figure 7: Proportion of tertiary educated workers in mid-low skill employment



Source: DOSM, LFS Time Series, TRACERS 2011, 2012, 2013, 2014, & author's calculations

Rising unemployment and underemployment rates among graduates sheds some light on why PTPTN's loan repayment rates are so low – many of the borrowers simply are not earning enough to service their loans. Some reports indicate that the starting salary for a fresh graduate averages RM2000 to RM2200 a month, which is not a big increase from RM1800, which was the average monthly salary a decade ago.³⁴ With rising living costs, especially in the urban areas, a fresh graduate may not have much leftover income to service his or her PTPTN loans after accounting for daily expenses and paying off other debt obligations such as car and credit card bills.

IPTS graduates who have higher PTPTN debts and hence, higher servicing costs, may find it especially difficult to repay their loans. The higher costs of a IPTS degree coupled with a relatively low starting salary creates additional challenges. According to research by Dr. Geoffrey Williams, a fellow at the Penang Institute, in some cases, the return on investment (ROI) gained from earning a degree from a IPTS is actually lower than the returns from Employee Provident Fund (EPF) investments.³⁵

³⁴ <http://www.themalaymailonline.com/malaysia/article/how-the-pay-squeeze-made-your-pricey-university-degree-kind-of-worthless>

³⁵ <http://penanginstitute.org/v3/research/penang-institute-in-kuala-lumpur/reforming-higher-education-scholarship-or-vocationalism>

To recap, PTPTN’s low repayment rates are partly due to borrowers under-prioritizing their loan repayment, but additionally, there is also the economic reality that many graduates are increasingly finding it difficult to secure jobs that pay well enough to service their loans on top of their existing living costs.

As a result of low repayment rates, PTPTN has had to constantly seek out fresh funding from banks, institutions such as the EPF or rely on bond issuance to continue giving loans to new borrowers. This means that the cost of servicing overall debts also increases, thereby putting further strain on the balance sheet and cash flow.

Low repayment rates aside, there are other reasons for PTPTN’s financial challenges, such as bearing the cost of exemptions or waivers for borrowers who obtain a First Class Honours in their course of study, and giving discounts for early repayments of loans.

5.2 Cost of loan forgiveness for students with first class honours

Graduates who complete their studies with first class honours are exempted from repaying their PTPTN loans in entirety. As of 31st December 2015, 30,727 students have been exempted with a total waiver of RM841.57 million in tuition fees.³⁶ Out of these students, 23,043 students were IPTA students receiving waivers up to RM469.67 million and 7,684 students were IPTS students receiving waivers up to RM371.9 million.³⁷ A first-class student from a IPTS received an average of RM48,399 in loan exemptions, while a first-class student from an IPTA received less than half that amount, an average of RM20,382 in loan exemptions. (See Table 6 below)

Table 6: Breakdown of 1st class honours PTPTN exemptions into IPTS and IPTA recipients up to Dec 2015

Item	IPTS	IPTA	Total
1st Class Loans Forgiven (RM million)	371.9	469.67	841.57
1st Class Loans Forgiven (#)	7,684	23,043	30,727
Average 1st Class Loan Forgiven (RM)	48,399	20,382	27,389

Source: PTPTN Annual Report 2015

In 2013, the cost of 1st class honours waivers for PTPTN borrowers peaked at RM151 million. The cost in 2015, which was borne directly by the federal government rather than PTPTN, was RM131.5 million. (See Table 8 below).

Table 7: Cost of 1st Class Honours Waivers (2011 to 2015)

Year	Cost of 1 st Class Honours Waivers for PTPTN Loans 2011-2015 (RM)

³⁶2015 PTPTN Annual Report, p. 46

³⁷ We estimate that approximately 1.7% of students in each cohort who have PTPTN loans receive 1st class honours

2011	83,101,207
2012	121,324,463
2013	151,647,701
2014	90,142,316
2015	131,539,410

Source: PTPTN Annual Report 2012-2015

Owing to PTPTN's increasing financial difficulties, from 2015 onwards, the cost of PTPTN first class honours waivers was borne by the federal government instead of the agency.

The waiver policy is a popular one. By rewarding high performers, it provides an incentive for students to improve their academic performance. Yet the progressiveness of this policy is questionable, given that students from the middle and upper classes tend to be over represented among the students who obtain first class honours, be it in the public or private universities. Various studies conducted in other countries have shown a link between university performance and the student's socio-economic status.³⁸

One can also argue that students who obtain 1st class honours are more capable of servicing their PTPTN loans, since these top performers are more likely to find high paying jobs and are also more likely to experience accelerated promotion.

5.3 Cost incurred for discounts for early repayment of PTPTN loans

In the past, PTPTN has offered discounts to borrowers who choose to pay off their loans in a one-off lump sum (20% discount) or who have been regularly servicing their loans over a 12-month time-period (10% discount). The 20% discount for the one-off PTPTN payments was offered during the time-period 1st October 2012 to 30th September 2013 and from 10th October 2014 to 31st March 2015.³⁹ The 10% discount for the 12-month instalment payment was offered from 1st October 2012 to 31st December 2015.⁴⁰

Before 2015, the costs for these discounts were absorbed by PTPTN, resulting in significant expenses. Starting from 2015, the federal government took over the burden of bearing these costs. In 2013 alone, PTPTN paid:

³⁸ Andres, L., Adamuti-Trache, M., Yoon, E., Pidgeon, M., & Thomsen, J. (2007). Educational expectations, parental social class, gender, and postsecondary attainment: A 10-year perspective. *Youth & Society*, 135-63.

Smith, J., & Naylor, R. (2001). Determinants of degree performance in UK universities: a statistical analysis of the 1993 student cohort. *Oxford Bulletin of Economics and Statistics*, 21-60.

Blundell, R., Dearden, L., Goodman, A., & Reed, H. (2000). The Returns to Higher Education in Britain: Evidence from a British Cohort. *Economic Journal*, 110, F82-F99.

³⁹ <http://www.nbc.com.my/blog/faq-20-discount-on-ptptn-loan-settlement/> and <http://www.ptptn.gov.my/docs/Bajet2015/FAQ-diskaun20-bajet2015-final-latest.pdf>

⁴⁰ http://www.ptptn.gov.my/docs/Bajet2015/FAQ%20Rebat%2010_%20Bajet%202015_Final_28102014.pdf

- RM151.6 million on behalf of 79,134 students who received the 20% discount⁴¹
- RM6.9 million on behalf of 24,071 students who received the 10% discount ⁴²

In 2014, the discounts were temporarily suspended, before resuming for the period starting 10th October 2014 until 31st of March 2015. In 2014, the costs of the 20% and 10% discounts amounted to RM15.8 million and RM27.2 million respectively (See Tables 8 and 9 below). From October 2014 to March 2015, the total cost of the 20% and 10% discounts was RM 121.98 million and RM25.88 million respectively.⁴³

Table 8: Statistics for Full Repayment 20% Discount 2014

TAHUN	BILANGAN	BAKI PINJAMAN (RM)	DISKAUN (RM)	BAKI SELEPAS DISKAUN (RM)
Oktober	970	9,421,027.15	1,884,205.43	7,536,821.72
November	3,216	33,987,542.45	6,797,508.49	27,190,033.96
Disember	6,515	78,943,503.35	15,788,700.67	63,154,802.68

Source: PTPTN Annual Report 2014

Table 9: Statistics for Intensive Rebate 10% Discount in 2014

BILANGAN PENERIMA BIAYA	JUMLAH BAYARAN BALIK DITERIMA (RM JUTA)	JUMLAH DISKAUN DIBERIKAN (RM JUTA)
96,146	272.0	27.2

Source: PTPTN Annual Report 2014

The total costs for the PTPTN discounts from 2012 to 2015 was RM360.7 million (See Table 10 below)

Table 10: Costs of the 20% and 10% PTPTN discounts in from 2012 to 2015 ⁴⁴

RM Million	2012	2013	2014	2015	Total
Total	12.4	179.8	45.0	123.5	360.7

Source: PTPTN Annual Report 2013, 2014 and 2015

It is likely that these discounts were given in order to (i) increase the overall loan repayment rate, albeit in a costly manner (ii) to address funding and balance sheet problems that the agency faced because of the low repayment rates. However, the effectiveness of the discount policy remains dubious. Not only is it a costly exercise for PTPTN (and the government, which had to foot the bill for the 2015 discounts), it only benefits those students who can afford to fulfil the policy's terms and discounts of the discounts, i.e. by paying off the PTPTN loans at one go or in twelve months. Moreover, there is evidence to show that it is

⁴¹ PTPTN Annual Report 2013, pg. 32

⁴² ibid

⁴³ PTPTN Annual Report 2015

⁴⁴ There are discrepancies between the cost of the 20% and 10% discounts in the main section of the PTPTN annual reports and the audited accounts in the appendix of the reports. The figures reported in Table 10 are from the audited accounts.

usually the 'irresponsible' borrowers who take advantage of these discounts. For example, according to the 2013 PTPTN Annual Report, 4469 borrowers who were initially blacklisted for non-payment of the PTPTN loans repaid their outstanding loans at one go in order to obtain the 20% discount. These formerly blacklisted borrowers enjoyed a total of RM8.13 million in discounts or approximately RM1820 per borrower.

There are plans to introduce new discount policies in 2017, where a 15% discount will be offered for full settlement and a 10% discount for payments of at least 50% of the outstanding debt made in a single payment, for the period starting 22 October 2016 until December 2017. At the same time, borrowers who opt to service their loans through a salary deduction or direct debit in accordance with the repayment schedule will also get a 10% discount.⁴⁵

In summary, while poor repayment rates may be the main reason for the poor financial position of PTPTN, the waiver of the 1st class honours loans and the early repayment discounts are also significant contributory factors.

6. Steps taken by PTPTN to manage its financial position

In response to increasing financial constraints arising from low repayment rates, PTPTN had implemented several mitigation measures beginning from 2004. These included:

- I. Introducing the National Education Savings Scheme / *Skim Simpanan Pendidikan Nasional (SSPN)*
- II. Introducing the SSPN-i^{PLUS} scheme with insurance / *takaful* elements
- III. Increasing the number of PTPTN offices and payment options
- IV. Reducing the maximum loan amount for PuHEI and PrHEI courses
- V. Direct deduction from the salaries of civil servants who owe PTPTN money
- VI. Drawing from borrowers' Employees Provident Fund (EPF) repay PTPTN loans
- VII. Introducing Income Contingent Loan Repayment (ICLR) for civil servants
- VIII. Blacklisting PTPTN defaulters and preventing them from leaving the country
- IX. Credit Blacklist for PTPTN defaulters

⁴⁵ Ministry of Finance (2016), Finance Minister Najib Tun Razak's 2017 Budget Speech, Putrajaya. <http://www.treasury.gov.my/index.php/en/gallery-activities/announcement/item/1890-the-2017-budget-speech.html> (Last accessed 9 December 2016)

6.1 Introducing SSPN Saving Schemes

The National Education Savings Scheme (SSPN) was introduced in 2004 to encourage parents and guardians to save for their children's higher education needs. Today, it is compulsory for loan takers to open a SSPN savings account. The SSPN accounts serve two main functions. The more obvious one would be to encourage students and their families to save up money that will eventually go towards repayment. The second, less discernible function of these savings accounts is to provide much needed capital for PTPTN to give out loans to additional borrowers.

Various incentives exist for individuals who choose to sign up to the SSPN, a key benefit being tax relief assessment on current year savings for up to RM6,000 per year. Other benefits include free *takaful* coverage for depositors with over RM1,000 in their accounts, matching grants for families with monthly incomes of less than RM2,000 a month for up to RM10,000, competitive dividend rates (4.25%) and finally the chance to win prizes from a yearly and quarterly lucky draw for new account holders.⁴⁶

Table 11: Number of deposits and amount of money deposited in SSPN-i accounts over time⁴⁷

	2011	2012	2013	2014	2015
Number of SSPN Accounts opened	183,976	332,338	373,638	311,472	299,770
Total Number of SSPN-i Accounts	1,152,637	1,484,975	1,858,163	2,170,085	2,469,855
Amount of money deposited in SSPN-i Accounts (RM million)	142.2	251.6	378.83	398.24	498.24
Accumulated amount of money deposited in SSPN-i Accounts (RM million)	566.2	817.8	1,196.6	1,594.85	2,100.00

⁴⁶ <http://www.ptptn.gov.my/web/english/sspn-i>

⁴⁷ PTPTN Annual Reports 2011-2015

The number of SSPN accounts and total funds deposited has increased drastically in recent years. According to Table 10 above, total funds accumulated in SSPN-i accounts had almost quadrupled from 2011 to 2015, going from RM566.2 million in 2011 to RM2.1 billion in 2015. Meanwhile, the number of accounts increased from 1.15 million to 2.47 million in the same time period. It is likely that these dramatic increases were driven by the incentives that were afforded to account holders.

Despite this, there are some underlying issues with the SSPN savings scheme. Firstly, the interest rate charged to SSPN account holders is considerably higher than the market rate for commercial bank accounts, at 4.25%. In the long term, it may not be feasible to maintain such a high interest rate for SSPN account holders. This constitutes a risk given that PTPTN's dependency on government grants already puts it in a vulnerable position.⁴⁸

Secondly, the cost of funds for the PTPTN, under normal circumstances, will be less than 4.25%, which is the interest rate currently enjoyed by the SSPN account holders. Back in 2012, PTPTN managed to raise RM2.5b via sukuk bonds with a yield of 3.83%.⁴⁹ (The dividend for SSPN-i accounts was reduced to 4.00% in 2015) In other words, it may be cheaper for PTPTN to borrow from the bond market rather than relying on raising funds via SSPN accounts.

Thirdly, the necessity of having yearly and quarterly lucky draw incentives is rather dubious. The first prize for the yearly lucky draw is an apartment worth RM500,000 while the quarterly lucky draw for new depositors offers a BMW320i car. While these prizes are certainly attractive, it seems somewhat unnecessary for PTPTN to spend over a million ringgit each year on such prizes when the incentives for opening a SSPN-i account are already considerable.

Figure 8: Sample of SSPN-I "lucky draws"



⁴⁸ PTPTN faces a quandary when it comes to SSPN dividends. If it offers a dividend which is much higher than the fixed deposit rate, it will face a higher cost of funds but if it offers a dividend which is not too different from the fixed deposit rate, this would reduce the incentive for borrowers to open more SSPN accounts.

⁴⁹ <http://www.freemalaysiatoday.com/category/nation/2012/06/13/ptptn-sells-sukuk-worth-rm2-5b/>

There is no way to objectively determine whether the SSPN savings scheme will produce a significant increase in the repayment of PTPTN loans. There is no legal mechanism that mandates SSPN account holders to use their savings to repay their PTPTN loans, even if the individual is a defaulter.⁵⁰⁵¹

The palpable increase in SSPN account holders could be attributed to individuals seeking to benefit from the attractive dividend rate and other incentives, instead of being driven by the need to save money for their higher education. The fact that beneficiaries can open more than one account, and that it is not necessary for the account holder to be a relative of the beneficiary (any Malaysian citizen can open an account for another Malaysian citizen) creates even more opportunities for the system to be abused.⁵² SSPN accounts can remain open even after the repayment of student loans, and there is no limit to the amount of money that may be deposited. These factors invite a risk of SSPN accounts being used to benefit those who already have access to capital rather than those who are the most in need of financial assistance. Based on PTPTN's 2014 annual report, Chinese held RM210.8 million in SSPN-i accounts for that year, more than double the amount held by Malay account holders (RM96.9 million)⁵³ (Figure 9 below). Account holders in Selangor also held a disproportionate percentage of funds in SSPN-i accounts, accruing a total of RM126.1 million which is almost equal to the amount of funds held by the next four closest states - Kuala Lumpur (RM 45.7 million), Penang (RM 33.4 million), Johor (RM 25.6 million) and Sarawak (RM 23.8 million)⁵⁴ (Figure 10).

The profile of SSPN account holders raises questions as to whether having these SSPN accounts are of significant help to PTPTN borrowers to start saving money in order to repay their PTPTN loans or whether these SSPN accounts are mostly being opened by individuals with excess savings and want to seek the higher returns offered by SSPN accounts as compared to fixed deposit rates.

⁵⁰ Forum on 'Sustainability of PTPTN' at IIUM, 3rd May 216

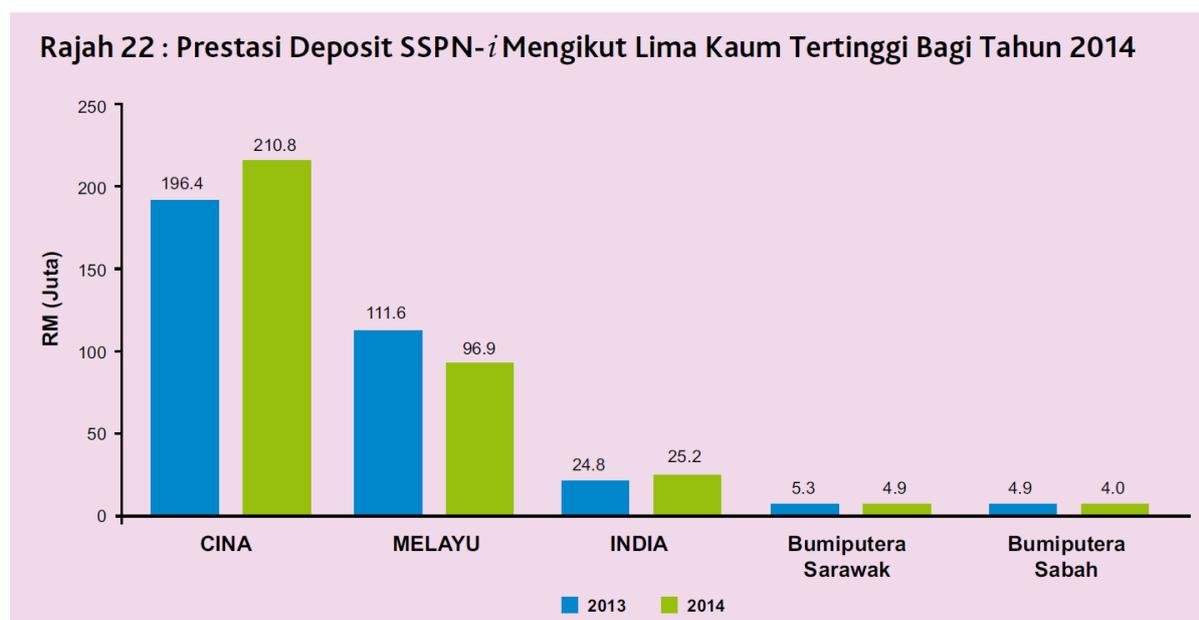
⁵¹ <http://www.ptptn.gov.my/web/english/sspn-i>

⁵² Ibid

⁵³ P.35 PTPTN Report 2014

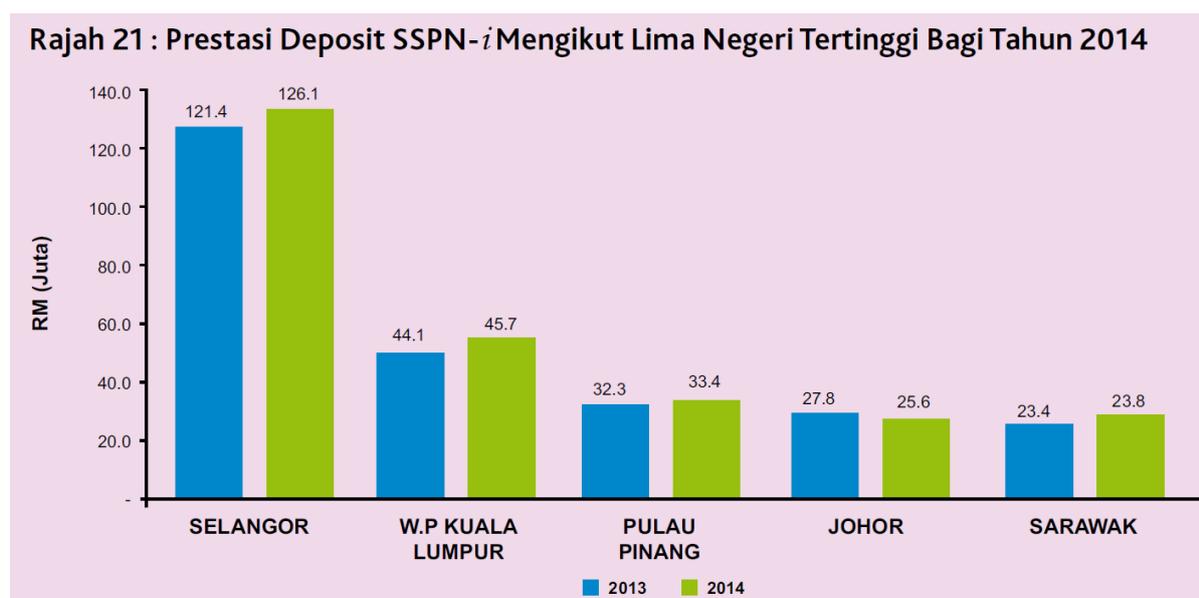
⁵⁴ P.34 PTPTN Report 2014

Figure 9: SSPN-i deposits by race, 2014



Source: PTPTN 2014 Annual Report, pg.35

Figure 10: SSPN-i Deposits by top 5 states, 2014



Source: PTPTN 2014 Annual Report, pg.34

6.2 Introducing the SSPN-i^{PLUS} scheme with insurance / *takaful* elements

In June 2015, PTPTN launched a new SSPN-i product called SSPN-i^{PLUS} which incorporated a *takaful* component. To give an example, a monthly contribution of RM50 would be divided into RM40 to be deposited into the conventional SSPN-i account and RM10 for the *takaful* contribution. The *takaful* component includes conventional life insurance

benefits such as death benefits as well as benefits for 36 critical illnesses. SSPN-i^{PLUS} was launched in cooperation with Hong Leong MSIG Takaful (HLMT).⁵⁵

Within seven months of its launch, a total of SSPN-i^{PLUS} 5,176 accounts were opened with total deposits amounting to RM1.79 million.⁵⁶

The move to diversify into other financial products may help increase PTPTN's access to alternative funding sources. However, it carries potential long term financial risk such as those highlighted in the previous section.

6.3 Increasing the number of PTPTN offices and payment options

PTPTN has expanded its physical presence by establishing 74 offices (according to the 2015 PTPTN Annual Report) across the 13 states and the Federal Territories (excluding Labuan) (See Table 11 below). Many of these offices are located in high traffic areas such as the Urban Transformation Centres (UTCs) and shopping malls. The purpose of increasing the number of offices nationwide is to enable PTPTN to better service its clients and, in so doing, increase the rate of repayment of PTPTN loans.

Table 12: Number of PTPTN offices by state

State	Number of Offices
Kuala Lumpur	16
Selangor	8
Johor	7
Perak	6
Pulau Pinang	4
Pahang	4
Kelantan	5
Negeri Sembilan	4
Melaka	4
Sabah	4
Sarawak	5
Kedah	3
Terengganu	3
Perlis	1
Total	74

PTPTN has also established payment counters in *Pos Malaysia* offices, local banks and online banking services to increase the payment options available to PTPTN borrowers. A careline has also been established to take enquiries from customers.⁵⁷

⁵⁵ Details can be obtained here: <https://sspniplusonline.ptptn.gov.my/>

⁵⁶ 2015 PTPTN Annual Report, pg. 47

⁵⁷ Careline number : 03 -2193 3000

6.4 Reducing maximum loan amounts for the PuHEIs and PrHEIs in November 2014

In November 2014, PTPTN announced that it was slashing the maximum loan amount for degree courses at PrHEIs and PuHEIs by 15% and 5% respectively (with the exception of medical courses at PrHEIs) due to shortage of funds.⁵⁸ Following this move, the maximum loan for an undergraduate degree at a PrHEI was reduced from RM16,000 per annum to RM13,000 per annum, whereas for diploma programs, the maximum amount was reduced from RM8,000 to RM6,800. For an undergraduate degree at a PuHEI, the maximum amount was reduced from RM6500 to RM6180. For Masters and PhD degrees, the maximum amount was reduced from RM10,000 and RM26,000 to RM9,500 and RM24,700 respectively. The maximum loan amount for medical degrees in PrHEIs was maintained at RM30,000 per annum (See Figure 11 below).

Figure 11: Change of loan rates starting from November 2014 ⁵⁹

IPT/ PERINGKAT PENGAJIAN	SEDIA ADA			BAHARU		
	Penuh	Sebahagian	Yuran	Maksimum*	75%	50%
	RM	RM	RM	RM	RM	RM
IPTA & POLITEKNIK						
Diploma	5,000	2,500	1,000	4,750	3,560	2,380
Ijazah Sarjana Muda	6,500	3,000	1,100	6,180	4,630	3,090
Sarjana	10,000	10,000	10,000	9,500	7,130	4,750
PHD	26,000	26,000	26,000	24,700	18,530	12,350
Kursus Profesional	6,000	6,000	6,000	5,700	4,280	2,850
IPTS						
Diploma	8,000	8,000	8,000	6,800	5,100	3,400
Diploma Sains Kesihatan	15,000	15,000	15,000	12,750	9,560	6,380
Ijazah Sarjana Muda	16,000	13,000	10,000	13,600	10,200	6,800
Ijazah Sarjana Muda Perubatan	30,000	30,000	30,000	30,000	30,000	30,000

Source: Department of Higher Education / Jabatan Pengajian Tinggi

Alongside this, measures were taken to modify the income criteria for loan applicants, as seen in Table 13 below. Significantly, a loan threshold of 50% maximum loan amount was imposed for students living in non BR1M households with a joint household income over RM8000 per month. Meanwhile, students whose families were not BR1M recipients but whose household income amounted to less than RM8000 per month were eligible to borrow up to 75% of the maximum loan amount. These measures were aimed at reducing the amount

⁵⁸ <http://www.thestar.com.my/news/nation/2014/11/04/ptptn-reduces-loan-amount-by-5-and-15/>

⁵⁹ Table obtained from *Pekeliling PTPTN Bilangan 1 Tahun 2014* (<http://jpt.mohe.gov.my/images/Pekeliling/Pekeliling-PTPTN-Bil-1-2014.pdf>)

of loans given out and so increase PTPTN’s financial sustainability. However, the criteria did not bar upper strata students from acquiring these loans.

Table 13: Funding Policy (effective from 1 Nov 2014 Onwards)⁶⁰

Maximum eligible loan	Criteria
Maximum	Student or Guardian is a Bantuan Rakyat 1 Malaysia (BR1M) recipient
75% of Maximum	Household income up to RM8,000 (not BR1M recipient)
50% of Maximum	Household Income more than RM8,000 (not BR1M recipient)

According to Tham (2011), prior to 2010, students from families with a monthly household income of less than RM3000 were eligible for the maximum loan, while those falling within the RM3001 and RM5000 household income category were eligible for partial loans (covering tuition fees and partial living costs). Students from wealthy families (household income of over RM5000) were only eligible for loans solely covering tuition fees. However, the current conditions seem to be more relaxed, given that income thresholds have shifted from RM5000 to RM8000.

Under the current system, there does seem to be an element of means-testing in the maximum loan amount a student can borrow from PTPTN. However, it must be noted that even students from very wealthy families are eligible for these loans. For example, a student from a family with a household income of RM100,000 a month is still eligible to borrow 50% of the maximum loan amount, calling into question to actual efficacy of the policy.

6.5 Direct deduction from the salaries of civil servants who have PTPTN loans

In 2015, PTPTN, in collaboration with the Inland Revenue Board (IRB) of Malaysia, introduced the direct salary deduction (or direct debit) repayment method for government servants owing payments. In that year, a total of 3,000 civil servants had between 30 and 100% of their salary deducted to service their PTPTN loans in 2015.⁶¹ Over 138,000 civil servants were also registered to have mandatory deductions from their salaries in order to service their PTPTN loans.⁶²

⁶⁰ www.thestar.com.my/news/nation/2014/11/15/ptptn-only-nov-1-reduction/

⁶¹ The Star (2015). Shamsul Anuar: PTPTN to explain salary deduction for civil servants on Monday

Found at: <http://www.thestar.com.my/news/nation/2015/12/26/shamsul-anuar-ptptn-to-explain-salary-deduction-for-civil-servants-on-monday/>

⁶² 2015 PTPTN Annual Report pg.17

6.6 Usage of the Employees Provident Fund (EPF) to pay back PTPTN loans

Beginning 2015, EPF account holders were permitted to draw out of their Account II savings to repay their PTPTN loans. 25,568 account holders used RM209 million in 2015 to repay their PTPTN loans and a further 33,824 account holders used RM235.7m in 2016 to repay their PTPTN loans.⁶³

6.7 Introducing Income Contingent Loan Repayment (ICLR)

IN April 2015, then Minister of Education, Tan Sri Dato' Haji Muhyiddin bin Yassin, announced that PTPTN loans would be serviced on an income contingent basis.⁶⁴ This means that loan holders repay their loans based on a pre-determined percentage of their salary only when their income level has reached a specific threshold. At the time of writing, it remains unclear if this policy has been implemented. This policy is meant to lessen the debt burden of PTPTN loan holders, especially for those whose salaries are still relatively low. While this is a progressive policy that has been adopted in several developed countries, postponing repayment will only serve to perpetuate the strain on PTPTN's financial position.

6.8 Blacklisting PTPTN defaulters and preventing them from leaving the country

As of March 2015, 84,308 PTPTN loan defaulters were blacklisted and banned from leaving the country via the Malaysian Department of Immigration.⁶⁵ The intention was to compel those wishing to travel overseas to start taking action in servicing their loans.⁶⁶

6.9 Poor Credit Rating for PTPTN defaulters

In 2015, PTPTN introduced a system of recording loanholders' repayment record in the Central Credit Reference Information System (CCRIS), a credit rating system. The loan repayment record of each loan holder would be included in their individual CCRIS report and should they fail to service their loans regularly, they would see their credit ratings fall. The punitive effects arising from this include barring from credit card applications, housing loans and other financial products from financial institutions.⁶⁷ The credit 'blacklist' was intended to compel PTPTN borrowers to service their loans in a regular and timely fashion.⁶⁸

From 16th June 2015 to the end of 2015, a total of 136,792 PTPTN borrowers were blacklisted in CCRIS for failing to service their loans within 3 months (and more), for the period

⁶³ <http://www.nst.com.my/news/2016/05/147321/more-malaysians-using-epf-pay-ptptn-loans>

⁶⁴ <http://www.themalaymailonline.com/malaysia/article/under-new-ptptn-rules-repayments-contingent-on-pay-increase-ministry-says>

⁶⁵ Figure obtained from a Parliamentary Reply (RT39/379) from Education Ministry to YB Ahmad Marzuk bin Shaary

⁶⁶ <http://www.ptptn.gov.my/web/guest/tindakan-senarai-hitam-imigresen>

⁶⁷ <http://www.ptptn.gov.my/web/guest/penyenaraian-peminjam-ptptn-dalam-central-credit-reference-information-system-ccris>

⁶⁸ <http://www.thestar.com.my/news/nation/2016/09/24/ptptn-borrowers-now-blacklisted-credit-rating-of-13-million-borrowers-who-didnt-service-study-loans/>

beginning 1st January 2012 until 31st December 2014. The total outstanding loans amounted to RM1.272 billion.⁶⁹ As a result of getting blacklisted, 27,271 borrowers started servicing their loans and paid back RM112.53 million.⁷⁰

6.10 Effectiveness of these steps

To what extent have these measures helped increase the PTPTN repayment rates? Early evidence gathered does not show much promise. As of Feb 29, 2016, PTPTN was due to collect RM15.8 billion in repayments but it had only received RM7.9 billion or 50% of the total amount. While this is an improvement from the 46.6% received at the end of 2015 (See Table 5 above), it is still not enough to guarantee financial sustainability.⁷¹ In other words, PTPTN may have to keep on relying on substantial government grants to continue its operations.

7. Projecting PTPTN loan amounts and possible 'bailout' costs moving forward

As enrolment in public and private HEIs continues to increase, PTPTN must continue to meet the rising demand for student loans while attempting to tackle the problem of low repayment rates. Among the factors which must be taken into account is the projected increase in the IPTS enrolment under the Higher Education Blueprint 2013-2025.

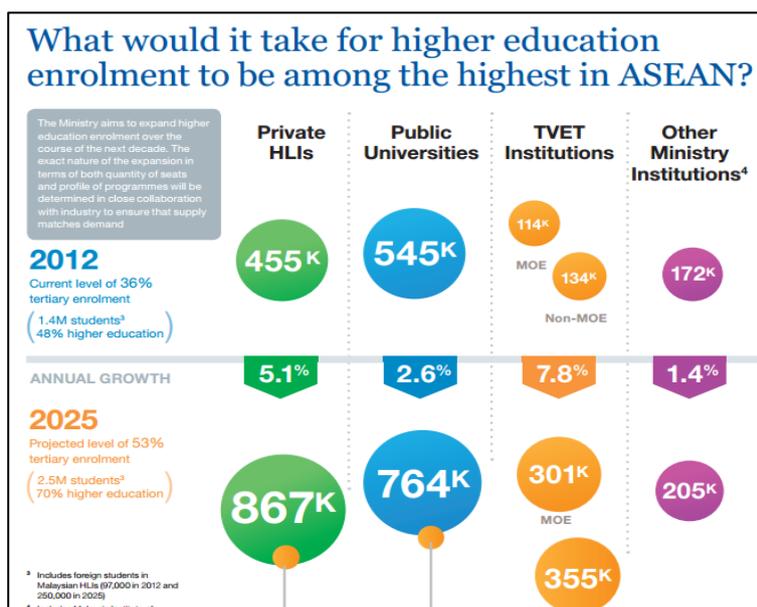
According to the Blueprint, IPTS enrolment levels are expected to exceed that of IPTA, with IPTS being projected to grow at a 2.5% higher growth rate than IPTA from 2012 to 2025. Student enrolment in IPTS is projected to increase from 455,000 to 867,000 during this time period, while the corresponding increased for IPTA is 545,000 in 2012 to 765,000 in 2025. The tuition fees for IPTS, which usually operate on a for-profit model, are significantly higher than their public counterparts. With a greater proportion of IPTS students seeking PTPTN loans, it follows that the total amount of funds required to meet this demand would also have to increase commensurately. If repayment rates continue to stagnate at low levels, PTPTN will be digging itself into a deeper financial hole.

⁶⁹ 2015 PTPTN Annual Report

⁷⁰ Ibid

⁷¹ <http://www.theheatmalaysia.com/Main/If-you-don-t-repay-your-PTPTN-loan>

Figure 12: Projected Enrolment in IPTS and IPTS, 2012 to 2025 ⁷²



To date, no official estimates are available on the ‘bailout’ costs that the government would have incur as a consequence of PTPTN’s deteriorating financial position. In the past, the government has contributed generous grants, which were largely used to pay off the agency’s interest servicing obligations. From 2015 onwards, the government also bore the costs of loanholders’ 1st class honours waivers and discounts for the early repayments of PTPTN loans.

Table 14 below shows the projections of some key figures in 2025 pertaining to PTPTN loans. The methodology used to calculate these projections is elaborated in Appendix 1 below.

Table 14: Projects of key figures pertaining to PTPTN loans in 2025

2025	Local Student Enrolment	% of students who apply for PTPTN loans	# of Loans Approved	Average Loan Amount (RM)	Amount of Loans Approved (RM billion)	Cumulative Loan Amount (RM billion)
IPTA	322,724	50%	161,996	20,303	3.3	57.8
IPTS	247,230	75%	185,422	37,489	6.95	83.7
Total	569,954	61%	347,418	29,503	10.05	141.5

Source: PTPTN Annual Reports 2012 to 2014, Parliamentary Replies 2013 to 2016, Own Analysis

⁷² Can be found on pg. 13 of the Malaysia Education Blueprint Higher Education 2013 to 2025

The annual intake of local students in IPTA and IPTS is projected to increase to approximately 322,000 and 247,000 respectively in 2025 (The figures here are annual local intake figures, as compared to total enrolment figures, including foreign students, as stated in Figure 12 above). Of these, the percentage of successful loan applicants from IPTA and IPTS are assumed to be 50% and 75% respectively in 2025. The number of loans approved for IPTA and IPTS are approximately 162,000 and 185,000 respectively, while the average loan amounts are RM20k and RM37.5k respectively. The total annual loan amount for IPTA and IPTS is projected to reach RM3.3 billion and RM6.95 billion respectively in 2025. Finally, cumulative loans given out to IPTA and IPTS are projected to reach RM57.8 billion and RM83.7 billion respectively.

Based on these projected figures, it is possible to calculate an estimate of the annual and total 'bailout' costs for PTPTN to be incurred by the government. Due to increased borrowings to meet increasing demands for loans, the total amount of grants needed to cover PTPTN's interest payments will increase to RM2.86 billion in 2025. The cumulative grant costs for the period 2015-2025 is expected to total RM23.7 billion. Meanwhile, the cost of bearing loan discounts is projected to touch RM173.8 million in 2025 and the cumulative discounts costs from 2015 to 2025 will total RM1.3 billion. Finally, the costs 1st class honours waivers will reach RM138.7 million in 2025, with cumulative costs totalling RM1.09 billion. In summary, the annual 'bailout' costs for PTPTN to be borne by the government is estimated to reach approximately RM3.2 billion in 2025, while the cumulative costs spanning the decade will be RM26.1 billion (See Table 14 below).

Table 15: Annual and Cumulative PTPTN "Bailout" Costs for the Government 2025 and 2015-2025

	Grant to cover interest payments	Discounts (using 5% of total loans)	1 st class honours waivers (approx. 1.6% of total loans)	Total
Annual Costs (2025)	RM2.86 billion	RM173.8 million	RM138.7 million	RM3.174 billion
Cumulative Costs (2015-2025)	RM23.7 billion	RM1.3 billion	RM1.09 billion	RM26.1 billion

Source: PTPTN Annual Reports 2012 to 2014, Parliamentary Replies 2013 to 2016, Own Analysis

It is likely that these bailout costs are an underestimation of the actual losses. In 2015, PTPTN's total interest payments amounted to RM1.519 billion. An increase in the interest payments to RM2.86 billion in 2025 assumes a compounded annual growth rate (CAGR) of 7.5% when compared to the 17.5% CAGR from 2011 to 2015. Meanwhile, the cost of first class honours waivers totalled RM131 million in 2015 compared to the projected cost of RM139m in 2025, while the cost of discounts for early PTPTN repayment totalled RM123 million in 2015 compared to the projected cost of RM173.8 million.

These figures do not factor in the cost of writing off PTPTN bad loans i.e. loans which are unlikely to be serviced by loan takers. From 2011 to 2015, PTPTN's loan repayment rate had hovered around the 50% mark (See Table 5 above). Compared to this, the percentage of PTPTN loans classified as bad debts is much lower, at approximately 2.5%, based on the annual accounts. The assumption is that even if these loan holders do not service their loans regularly, they are still likely to repay at least a portion of their loans after being offered various incentives. However, as discussed above, these incentives do not seem to be producing the intended effect of increasing the loan repayment rate. In reality, the percentage of PTPTN 'bad' loans should constitute more than 2.5% of outstanding loans. If this is the case, then PTPTN's bailout costs will certainly amount to more than what is shown in Table 15 above.

8. Proposed solutions

Given the severity of its financial challenges, PTPTN should act quickly to remedy the situation before it worsens.

According to noted public economist, Nicholas Barr, student loan schemes should have the following properties: income contingent repayments, loans that are large enough to cover tuition fees and, where possible, part of the living costs, and charge an interest rate related to the government's cost of borrowing.⁷³ The following proposals incorporate some of the recommendations put forth by Barr, as well as other proposals which take into account the current situation in Malaysia and the challenges faced by PTPTN.

⁷³ Barr, Nicholas. *Paying for higher education: What policies, in what order?* Submission to the Independent Review of Higher Education Funding and Student Finance, February 2010.

(i) Conduct a comprehensive survey of PTPTN loan holders to accurately identify the reasons for the low repayment rate

This survey, which would be carried out by an independent survey firm, would collect data on the financial patterns of fresh graduates, such as the distribution of starting salaries, the type of jobs held vis-à-vis qualifications, other loan obligations besides PTPTN, daily and monthly expenses such as rent and other types of expenditure. The 2015 survey commissioned by PTPTN involved a very small sample of 200 respondents and did not include crucial information such as starting salary, type of course and the type of the IPTA or IPTS.

With more concrete data, PTPTN would be better-placed to introduce new policies such as income contingent loan repayments, variable interest rates and means tested loans (see below). Going a step further, the Ministry of Higher Education would be able to evaluate important trends such as completion rates in individual colleges and universities, as well as starting salaries of fresh graduates by course and individual colleges and universities. Overall, this would help in better planning for the higher education needs of the country moving forward.

(ii) Loan repayments should be contingent upon income

To ensure that low income earners are not excessively burdened by PTPTN loan repayments, graduates should have the option of repaying their PTPTN loans only if their monthly income exceeds a minimum amount, at say RM3500.⁷⁴ On top of this, monthly payment instalments could be capped at a percentage of borrower's income, say 10%. (Those who earn below this income threshold but who want to start repaying their loans should be allowed to do so).

(iii) Removing / Reducing Interest Rate Subsidies

Currently, PTPTN charges a 1% annual interest rate on its loans under the Ujrah repayment scheme. This is far below the 4% interest rate on government housing loans borne by civil servants. The interest rate subsidy on PTPTN loans should be reduced or removed completely. Coupled with the income contingent payment, this would make PTPTN loan repayments more equitable as even if the loan holder is charged a higher interest rate, he or

⁷⁴ <http://penangmonthly.com/tag/ptptn/>

she would only need to start repaying once above a certain threshold income. Such policies are already in practice in the UK, where student loan holders are charged differential interest depending on income level.

(iv) Automatic deduction of PTPTN loan repayments

In order to increase loan repayment rates, repayment should be automatically deducted from the salaries of those graduates who are already eligible to service their loans. This mechanism is already in place for EPF and SOCSO contributions. It is also a common practice in countries like Australia where automatic deduction amounts are adjusted according to the amount of salary earned.

(v) Means testing PTPTN loans

Currently, the amount of money that an individual can borrow from PTPTN is contingent on his or her family income. For example, a student from a family with household income exceeding RM800 a month would be able to borrow up to 50% of the maximum loan amount. But this is still not proper means testing. Students with parents earning over RM20,000 a month, for example, would still be eligible for a PTPTN loan. PTPTN loans should be properly means tested so that those above a certain monthly income threshold e.g. RM10,000 should not be eligible to take out a loan.

(vi) Reducing / Removing 1st class honours waivers and discounts for PTPTN loans

1st class honours waivers have cost PTPTN over RM600 million since its inception, while the 10% / 20% discounts on early loan repayment have incurred a further RM300 million. The loan discount is a problematic policy since it benefits the well-off who have the financial ability either to pay off their children's loans in one shot (20%) or regularly service their loans (10%). The 1st class honours waiver is also problematic since students from middle and high income families are disproportionately represented among 1st class honours holders. To increase its effectiveness, these policies should be revised. For example, the 1st class honours waiver should only be applicable to students from low-income families.

(vii) Increasing the maximum loan period

Current PTPTN policy dictates that a loan must be repaid within 5 to 15 years. Extending the length of the loan period beyond 15 years would allow struggling loan holders to reduce their monthly repayment obligations and so ease their financial burdens.

(viii) Shifting some of the loan burden to the private sector

Rather than relying totally on PTPTN to provide student loans, the government should shift part of the burden to the private sector. On its part, the government can provide loan guarantees similar to the My First Home financing scheme for first time homebuyers, whereby 10% of the total loan amount is guaranteed by CAGAMAS.⁷⁵

(ix) Consider a larger reform of the higher education sector

While the paper has focused directly on PTPTN, the government's strategic plans concerning higher education also have a significant impact on the agency's financial position. For example, the government envisions a rapid expansion in the number of students in PrHEIs but it has given little thought as to how these students will fund themselves, and the likely impact of this increase on demand for PTPTN loans. An attempt to address PTPTN's underlying problems should incorporate a fundamental review of the current Higher Education Blueprint, including re-examining the balance between IPTA and IPTS students, their respective funding models and assessing the quality of these higher education institutions.

Will these measures be sufficient to address PTPTN's woes? One cannot say for sure but if nothing is done, then PTPTN's balance sheet will continue to be a ticking time bomb that is just waiting to explode.

⁷⁵ <http://www.srp.com.my/docs/html/faq.html>

Appendix I: Methodology for projecting PTPTN 'bailout' costs

IPTA including polytechnics

Yearly student intake

Historical data was extracted from MOHE sources, related to student intake for qualification levels relevant to PTPTN. Statistics on advanced diploma and postgraduate diplomas were excluded as both these courses are unlikely to receive PTPTN support. Diploma students in KTAR were excluded as prior to 2013, the data record for this category is inconsistent. (KTAR was reclassified under IPTS in 2013)

The projection of yearly student intake was created using a linear model based on data from 2000 to 2014 for the following programs:

- Diploma (Polytechnic)
- Diploma (IPTA)
- Bachelor
- Master
- PhD
- Professional

The linear model was then used to project the total number of students from 2015 to 2025. It was necessary to calculate the percentage of local students over yearly student intake, since only local students are eligible for PTPTN. It was assumed that the percentage of local students out of total students remained the same for both intake and enrolment.

Number of local students with PTPTN

The percentage of local students with PTPTN loans was calculated by dividing the number of PTPTN loans approved by the local student intake. A linear projection was not possible due to the sudden drop in loans approved for the year 2014. Instead, the slope of best fit line was obtained for the period 2007 - 2013 and applied to the 2014 value to project percentages going forward. The estimated number of local students with PTPTN loans was obtained by multiplying the projected local student intake with the percentages.

Amount of loans approved

Simple linear projection of average loan amount approved per student using data from 2007 to 2014. The total amount of loans approved was obtained by multiplying the projected average loan amount by the number of local students with PTPTN loans.

IPTS

Unlike IPTA projections, it was not possible to create a detailed projection for IPTS loans due to missing data and inconsistent records. The number of local student intake was obtained by applying the same methodology used for IPTA. The projection was then made by modifying MOHE's projection for IPTS based on historical data.

It was assumed that the percentage of local student intake with PTPTN loans would increase to 75% by 2025 and linearly interpolated it for the years in between. A linear forecast was not possible as the percentage would have exceeded 100% by 2025. The annual growth rate for the average loan amount approved per IPTS student was assumed to be equal to the CAGR for 2007 - 2014. Finally, the total loan amount approved for IPTS was obtained by multiplying the average loan amount approved per IPTS student with the number of local students with PTPTN loans.

Total amount of loans approved

In 2016, PTPTN introduced a new policy, whereby the amount of money disbursed to loan holders was capped at 95% of total loan amount for IPTA and 85% for IPTS. To account for this change, we adjusted the total amount of loan approved accordingly. It was assumed that the new policy would be effective from 2016 - 2020. Following this, the total amount of PTPTN loans approved in 2025 amounts to RM 10.24 billion while the cumulative amount is RM 141.81 billion.

Annual Cost and Outstanding PTPTN Loans

An estimate of loan amounts given out annually was obtained using the projected figures for annual approved loan amounts.

("Approved loan amount" refers to the amount given for the entire course, while "actual loan paid" refers to the amount given out to enrolled students per year)

The amount of loans given out annually was calculated using the cumulative figures from the financial statements. The amount of loans given out in year N was assumed to be around 25% of the total amount of loan approved in the three years preceding (N-2 + N-1 + N) based on historical comparison (line 131), allowing for estimates of the amount of loans paid annually and the cumulative total to be made.

To estimate the cumulative amount that needs to be repaid, we compared the past ratios of amount that needs to be repaid in year N: cumulative loan approved in year N-3 - cumulative amount that is being paid back in year N-1

Rationale: Total amount of loan that needs to be collected is the total amount of loan that is given out three years ago (most of the students then would have graduated) minus the total amount of repayment up till year N-1.

Kelulusan N-3 rather than N-4 because curve is smoother. Also because loans for IPTS will dominate the total loans in the future. Projections for 2015 and beyond is done simply through linear forecasting.

To calculate the fund that PTPTN has to borrow from financial institutions, we assumed that they borrow just enough to cover pengeluaran bersih (cumulative loan amount given out in year N + cumulative advance loan amount in year N - cumulative amount repaid in year N-1)

Interest cost of the PTPTN fund is assumed to be 4% and government grant to cover the interest cost is assumed to be 102% of the interest cost.

To calculate hasil pembiayaan (administration fee / ujarah), we assumed a ratio of 0.9% for hasil pembiayaan in year N : cumulative loan amount approved in year N-3 - cumulative amount repaid in year N-1 (i.e. successfully recoup 0.9% interest on loans that remain unpaid)

For the cumulative amount of first-class waivers in year N, we assumed it to be 1.65% of the total loan amount approved in year N-3. The ratio for 2012 and 2013 were 1.64% and 1.64% respectively. The amount of discount given each year is difficult to estimate because both the 10% and 20% are introduced in 2012. We simply assumed that the discount amounts to 5% of whatever that is being collected in that year.

With these projections, We can then estimate the annual cost of PTPTN bailout. The annual cost consists of the 4% interest cost, the 1.65% first class waivers, and the 5% discount

The outstanding PTPTN loan is obtained by subtracting the cumulative amount paid in year N from the cumulative amount of loan that needs to be collected in year N.

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