Education commodification: university and professor funding, student loan risk assessment and webometrics.

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Abstract: - Commodification of education has a lot of aspects from theoretical extreme left or humanistic options to extreme right slavery actions. In our research we define the "politically correct" eligible student spending from the humanistic banker view. Then we present three proposals. For the first proposal the golden rule of our methodology is that we assume that all "student then taxed workers" above the sector average gained this excessive income, due to their previous University education. Then university funding follows this market oriented evaluation.
Our other proposals are not that radical but they use the existed banking rules to facilitate student education loans. Credit risk distribution and assessment is used to split the credit danger amongst a lot of financial partners. A similar practical method to evaluate student loan is the webometrics science. Webometrics is used extensive for worldwide university classification and it ready for student credit use.

*Key-Words: -*Barter, Risk Assessment, Education Commodification, University Funding, Webometrics

1   Introduction to Loan Characteristics

We apologize for the non-scientific extensive use of demonstration graphics but being only are a financing and investment research team we concentrated on the results side-bank. However this paper scope lies at:
- technology selection and evaluation.
- Patent and algorithms identification
- pre alpha test.
- economic funds attendance.

A student loan is a special type of loan. [1, 2, 3]. Since we study tax exception loans and IRS is evolved [4,5] scam is possible [6]. State support to education is a constitutional article all around the world [7, 8]. Authoring team are researchers and engineers therefore we examined all similar patents [9, 10, 11, 12, 13]
The financial view of education is necessary special today with education commodification in serious discussions. [14, 15, 16, 17]

2   Expenses coverage

The nature of the student load represents a typical long term commitment from both sides. However is not a typical banking transaction for reasons like:
- All youth irregularities could be occurred in a single loan giving action, making prediction impossible.
- Sometimes student period elongates to several, non fertile for the bank, years.
- A lot of European Universities teachers have the "professor hegemonic syndrome" and they truly believe that only professor deserves a passing grade on time (and budget).
- The exact cash needed varies in amount and time according to the indiscipline student life.

To improve the loan efficiency both for the student and the financial institution there is the need to issue the credit only to specific expenses. The nature of such eligible expenses is limited to primitive needs for the student life :
- Apartment loan at entry level facilities.
- Food and cheap meals with weekly and daily restrictions.
- Books, education material, university funds.
- Limited other services from sponsors only.

One other way to secure the loan operation is to divide the obligation to be paid with three money resources. Even for a single 10 €uro phone card payment could be as complicated as :

- 3 € euro cash.
- 3 € Euro through the restricted credit card
- 4 local-community-Euro in paper or through the card.

3   Student as commodity stock

The methodology describes Professor salary incentives in today's extreme competing environment. For this excessive world an equally exaggerated solution is necessary. The concept is to connect professor salary or University funding with the results. Towards this goal five steps are needed:

1. Student stock creation.
2. Student as a taxpayer
3. IRS calculation
4. University funding
5. Profit distribution

3.1 Student stock creation.
University student is divided in live stock and distributed to all learning process coefficients. Student stock distribution is:

- 1=professor for every lesson takes 3 dividends.
- 3=dean and rector takes 5 dividends for every student ever been under his authority.
- 3=teacher takes 1
- 4=The university takes 150 dividends.
- 5=various managerial clerks take 3 stock shares.

After student graduation the stock issuing stops and distributed to all beneficiaries. They have to wait to collect their profit, until and if their stock rise up.
In banking terms the student itself is:

Unconditional, Irrevocable, Transferable, Divisible And Assignable Standby Share Of Credit

3.2 Student as a taxpayer
The student graduates and starts working in the real world aggressive environment. Every year he submits to the taxes agency the declaration of income. We assume that this income is generated primarily due to the university acquired skills in order to keep the university environment competitive.
This taxpayer income is the only ultimate universal truth for the university and professor evaluation.

3.3 IRS calculation
All taxpayer declarations come to the taxnet clearance data processing center. There unlimited

statistics would prove everything. In our case we are seeking the best university in Greece.
First we seek for the best rookie. He is the most well paid worker amongst all first time taxpayers. The stock of this rookie is funded to climb up. A more serious universal approach is:

- Find all taxpayers
- in a specific sector
- only for the first 3 years

For these taxpayers we calculate the average income for this specific year. The golden rule of our methodology is that we assume that:

- all taxed workers above this average
- have this excessive income,
- due to their previous University education.

3.4 University funding
As a result of the IRS calculations there was an additional tax paid by the worker. A proportion of this tax must to be returned to the reason of its creation:

- The university and his professors.

3.5 Profit distribution
When finally the amount reaches back to its generated roots is stored to the University stock clearance center.
Finally all stockholders pick up their profit. This could happen even years after the actual education action.
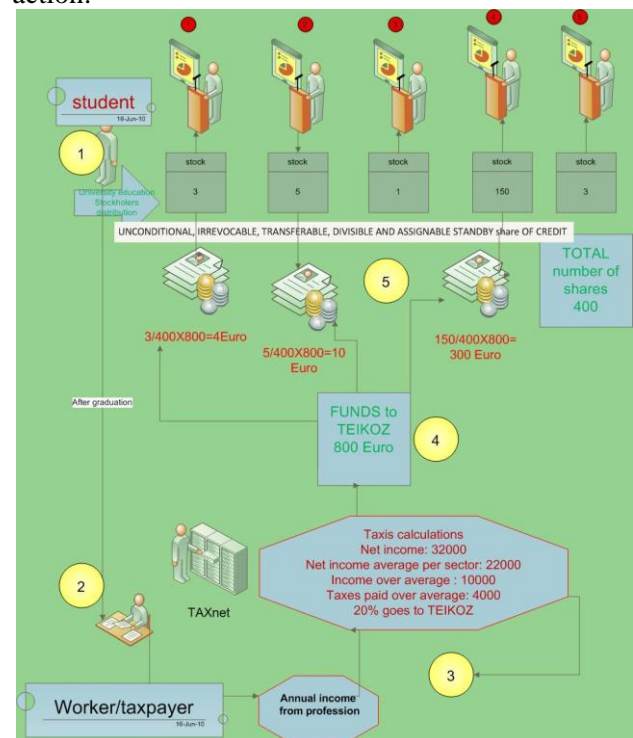

Figure 1, Student as a share of credit

3.6 Stock-student diagram

An example will clarify the complexity. Initially a professor teaches the students and takes 3 stocks. For similar actions we issue 400 stock dividends. After two years the graduated student submits to IRS his declaration that he earned 32000 €uros. IRS knows that the sector average is 22000 €. Therefore the student-worker extensive 10000 € income was that high, due to his initial university studies. This additional 10,000 € amount brings in the IRS a further 4,000 € tax. From this tax the 20% returns subsequently to his originated source TEI University of KOZANI.

There 800 €uros are accumulated to the student stock and are distributed accordingly. The professor that holds 3 stocks from the total of 400 earns the amount of 3/400 * 800 = 4 €.

Such a payment seems nothing but the older of the writers taught some 20000 students in his academic carrier. Being president and dean for years very easily he could work without any salary just to collect this 5 number Euro figure. Even after his death, the student-worket stock could give limit ups and profit to the happy inheritors a long time more.

4 Risk Distributed Student loan

It is a very common strategy for financial organizations to transfer their risk (and profit of course) to higher level. Credit risk distribution and assessment practical and theoretical aspects represent bank's internal information although a few scientific papers do analyze the subject [18, 19, 20, 21, 22, 23].

A typical student loan has in six steps:
- Loan request and paperwork.
- Transfer partially the loan to others.
- The loan is cashed in to the student with 3 options
- Cash in Euro
- Cash in Local currency
- Trough a dynamic cash card

4.1 Student loan example

An example will clarify methodology and reveal options.

A student in a regional university asks for a loan to concentrate exclusively in his studies. The student asks for the loan from any type of retail bank, financial broker or University commodified agency.

Due the high risk of this operation the broker asks complementary assurance from other different type of money suppliers:
- Bank of Greece, as a national depository to guard Hellenic and worldwide recognized values.

- Financial broker, as simple money lending, insurance agency or normal bank.
- Regional development Funds, with money raised to promote rural area growth.
- Local currency, that could be spend only to the local market.

Of course every credit source does not only borrow money but they promote altogether their own goals. For example local companies lend money to the student and they take it back instantly in a monthly closed loop.

After this risk transfer in a back to back operation the retail bank proceeds to loan allowance. According to the retail bank capabilities and the exact risk coverage by the other parties various options exist for the 20,000 € loan:
- 12000 € are given in cash at a 600 € per month rate.
- 8000 are given in local barter money usually to be spend within the University metropolitan area [24, 25].
- A dynamic debt card issue at both of the above currencies, 30000 € limit but with unlimited loan risk estimation capabilities.
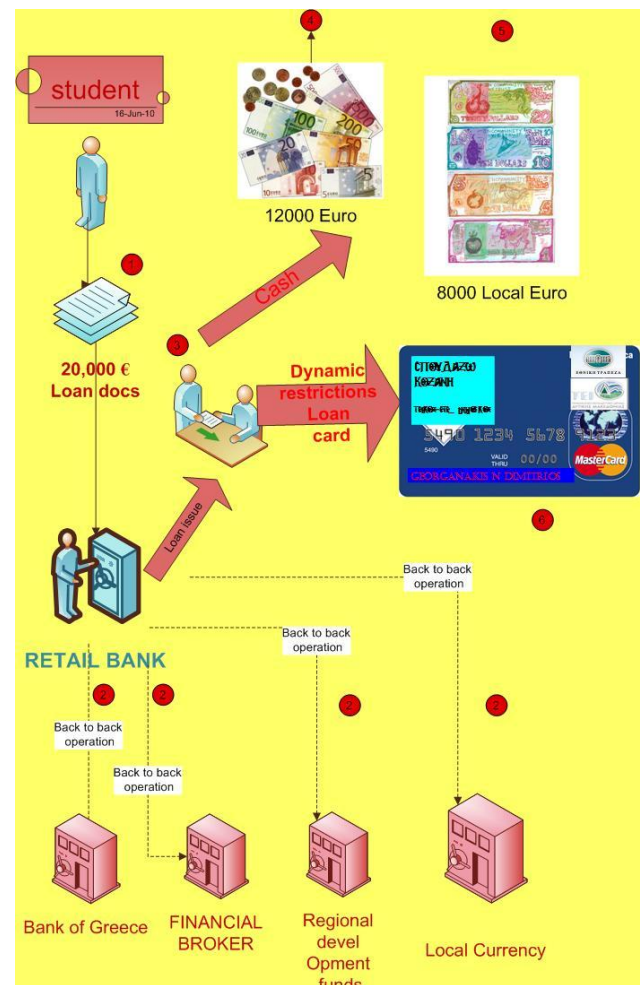
Figure 2, back to back risk distribution

Actually this final stage of the loan is a everlasting bank effort to manipulate loan spending according to strict rules. This is not always possible for most of the students being by nature rebels and nonconformists.

5   Webometrics student loan

In our days worldwide most Universities have a web interface. Webometrics approach classifies all the universities of the universe according to their internet presence. It concerns a very serious but only pure academic approach. When money talks others walks, as a similar business proverb indicates. In order to finance a student a much more complicated model is necessary.

Webometrics university worldwide ranking 3498 "teikoz.gr" student database schema includes all kind of information:

- Days left to graduation date.
- Lessons registration, exams, grades. (web)
- Laboratory presence, every day and final exams attainment.
- Exams questions, answers given and grade achieved (secure web)
- Homework actual text (ftp) per lesson.
- Academic behavior, presence (mail)
- Student social life, elections participated, excursions, social and political work. (web)
- On campus work and project related work. (secure web)

From these data the financial institution calculates in a bonus-malus approach the loan terms and reports minor or major modifications to the loan contract in a monopoly board game orders like:

- Work two weeks voluntarily to student admission.
- Replace a lesson with another one.
- Take a summer half ECTS credit three lesson course.

All these represent a rather non-academic practice but student and banker commonly they have only one concern: Facilitate the loan liquidation and ensure the final repayment. The method similarity with family pressure to conclude the studies is intentional and all around the world the same.

Webometrics loan is and additional reason for the University to improve its position in the worldwide classification system.
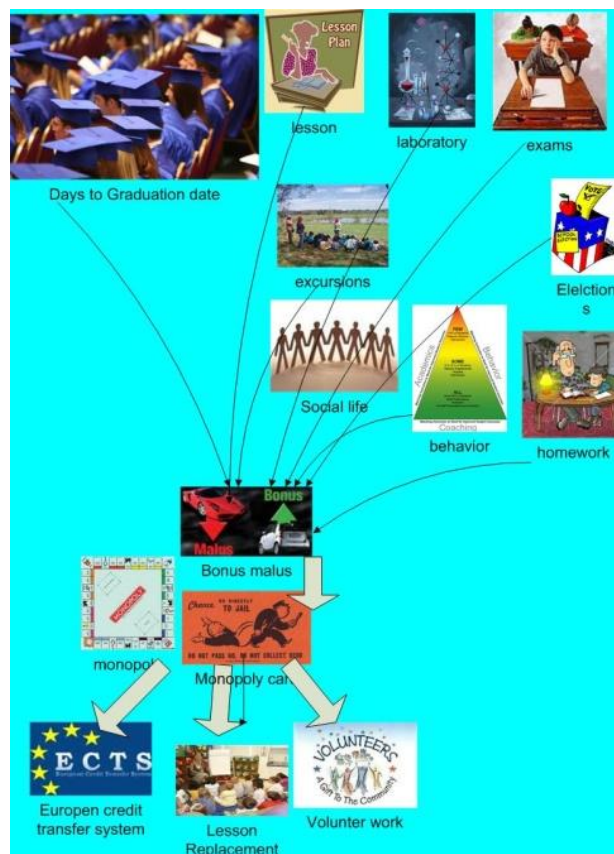

Figure 3, webometrics enabled loan

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