Rastin Personal Security (RPS)

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Abstract

Low return of social security organizations' funds and retirement pension funds does not lead the insured people to obtain the real power of their accumulated capitals from their insurance premium payments. Therefore, in order to solve this problem, establishment of private multi pillar pension funds and thrfts systems have been considered. In direction of providing necessary operational background for this task, Rastin Personal Security (RPS) as a subsystem of Rastin Profit and Loss Sharing (PLS) banking was designed.

In RPS, bank makes contracts among depositor/insured person, pension fund and entrepreneur as intermediate and provides necessary participation background for financing investment projects. By applying infrastructure of Rastin PLS banking, Rastin Personal Security will be practical and by issuing Social Security Certificate, Personal Security Certificate and Pension Security Certificates, provides new conditions for sharing of insured persons/depositors to fulfill the goals of social security and pension funds systems.


Introduction and Objective

Government retirement plans have been confronted with important problems in most countries around the world. Most of these plans create outstanding debt for governments and thus, many countries are trying to revise their retirement systems and pension funds. Defects and deep financial and structural problems of social security systems are among the main problems of welfare and social security policy making. Low return of funds and capital of social security organizations' and pension funds does not practically lead the insured people to obtain the real power of the accumulated capital from their insurance premium payments in the long run. This results to poor financial coverage during retirement period of insured peoples. To solve this problem, establishment of private pension funds, multi-pillars pension funds and individual private account (thrift) for insured people have been introduced. However, these plans work better than governmental pension funds and security organizations, but suffer from relative inefficiency due to weak supervision and concentration of activities in one place. To remove these deficiencies, Rastin Personal Security (RPS) is introduced under Rastin PLS banking.²

Methodology and Scope

In Rastin Personal Security (RPS), bank intermediates between depositor³/insured person,

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² For more information and full-text documents about Rastin Banking see: http://www.bidabad.com
³ Depositor is real person or legal entity with a certain amount of fund (cash) asks PLS bank to participate in Rastin PLS banking products through direct contact with PLS bank, or via internet and buys Rastin Certificate of one of the PLS banking products.
pension fund, and makes contracts with entrepreneurs\(^4\) and provides necessary participation background for investment projects\(^5\). RPS is a financial subsystem of Rastin PLS banking\(^6\) and in this regard works under the regulations of Rastin PLS banking base system\(^7\) and its subsystems\(^8\).

New financial innovations are used in Rastin PLS banking. By application of Rastin PLS infrastructure, the RPS can be applied, and by issuing Social Security Certificate, Personal Security Certificate and Pension Security Certificate, provides new conditions for participation of insured persons/depositors to achieve the goals of social security and pension funds.

**Pension funds**

Pension plans are programs according to which, after the end of service, member receives benefits in the form of pension benefits and payments. Pension fund is an independent legal entity that operates under the titles such as fund, institute and so on according to law, articles of association or special instruction, in the field of supplying pension benefits for members. Members include employed and retired persons who enjoy pension benefits. Pension benefits include pension and other benefits which are expected to be paid to the members in proportion to their years of membership and amount of insurance premium payments.

Pension funds have important effects on capital market and its efficiency; and are a permanent source for financing investment projects. The income sources of these funds can relatively be more stable than income sources of other financial institutes. This is because people permanently allocate portion of their incomes as insurance premium to these funds during their membership period.\(^9\)

**Multi-Pillars Pension Systems**

Pension systems around the world are very diverse\(^10\). Multi pillars systems are formed from mandatory and voluntary pillars. The base pillars, generally, have redistributive role for securing retired people livelihood and insurance pillars have the role of income substitution during unemployment and preserving income level of the retired persons. Redistributive pillar provides minimum standard of living, and insurance pillars make assurance of obtaining living standards of membership time during retirement.

Social securities are generally mandatory and accordingly, the member of the fund is confident to obtain minimum income coverage for retirement time. The supplemental pension plans are considered as part of retirement system for better financing of retirement life, which can be voluntary or mandatory and is conducted by cooperation of employer and employee and if it is voluntary, some persuasive privileges are introduced for the employee to consider it as an investment for retirement. Supplementary retirement...

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\(^4\) Entrepreneur is a real person or legal entity who proposes a project to PLS bank for financing through PLS banking system and executes the project until the end. In addition to have legal, financial, technical and performance capabilities, the entrepreneur should have the other capabilities and facilities/possibility to carry out the job.  
\(^5\) Project is a collection of economic activities with specified and concrete plan with defined cost and terms for making profit through Rastin PLS banking offered to PLS bank.  
\(^6\) Rastin Profit and Loss Sharing (PLS) is an activity in Rastin Banking based on participation of depositors in investment and economic activities of entrepreneur based on real yield of projects in order to land interest-free banking according to Islamic commandments and ethics.  
\(^7\) Base System of PLS banking includes the main general rules and terms of Rastin PLS banking.  
\(^8\) Financial subsystems of Rastin PLS banking system refer to different defined financing methods and services. These subsystems are governed by Rastin PLS Base System's regulations.  
Angelo Marano (2003), The effects of pension funds' development on the financial markets in Italy, Germany and France. http://cosmic.rrz.uni-hamburg.de/webcat/hwwa/edok04/t105z/ WP03-17.pdf  
plans are divided into job retirement plans and personal account (thrift) retirement plans. Job retirement is in connection to the job of the person and in order to participate in this plan, the person has to be employed. But, in thrift plan there is no need of having job relationship.

Proposed pillars\(^{11}\) of OECD\(^{12}\) include the following:

1. Retirement plans managed by government and are financed in form of DB-PAYG.\(^{13}\)
2. Retirement plans managed by private sector and are financed through the cooperation of employee and employer.
3. Personal account retirement plans as thrift saving plans.

World Bank proposes the following pillars\(^{14}\):

1. Supportive pillar, with government finance.
2. Small supportive pillar with government management via DB-PAYG.
3. Mandatory pillar with private management.
4. Voluntary pillar with personal account thrift saving retirement plan, with private management.

Prudential funds are also a kind of saving funds for retirement, that invest the defined contributions (DC) and pays pension benefits in lump sum when the person becomes retired. Members of some of these funds are allowed to receive a portion of their retirement benefit in lump sum and the left in monthly payment.

The Necessity of Retirement System Reform

Improvement of economic, social conditions and increase of health level and decrease of birth rate more or less in all countries cause aging of population as a common phenomenon that has a vast effects in social security and pension policies performances. Oldness of population causes social security costs and demand for health care, in-door services, old vulnerable people housing services and elderly houses to increase. This needs financing sources increase in the long run. Therefore, pension plans face big problems in most countries and have huge debts to governments. Although governments find solutions from public resources to finance government employees, but finally these employees covered by social security systems suffer from poor performance of pension funds\(^{15}\).

Countries’ struggle\(^{16}\) for facing unstable PAYG private sector pension systems in which private sector is responsible for managing pension plans, has developed considerably and has obvious role beside government retirement systems. OECD has undertaken guiding of member countries in pension policies in recent years.\(^{17}\)

Responsive and supporting members’ rights necessitate precise supervision structure on huge turnover of social security institutes. The insurance premium streams obtained from retirement plans and returns of their investments in turn should be managed and supervised in such a way that compensation of

\(^{11}\) OECD (2008), Complementary and private pensions throughout the world, 2008. ISSA, IOPS.
\(^{12}\) OECD (2006), Guidelines on pension fund asset management.
\(^{13}\) Retirement plans may be classified as “Defined Contribution” (DC) and “Defined Benefit”(DB) according to how the benefits are determined. In a DC plan, contribution is saved in member account and then is invested, and (positive or negative) return of the investment is credited to the member's account. On retirement, member's account is used to pay retirement benefits to him and provides him a regular income. A DB plan guarantees a certain fixed-formula payout at retirement depending on the member's salary and membership duration. In an unfunded DB plan, no assets are set aside, and pension sponsor pays benefits when they are to be paid. Governments in most countries use this method as Pay-as-you-go (PAYG).
\(^{17}\) OECD (2008), Survey of investment regulations of pension funds.
retirement benefits and other obligations be feasible. In this regard, by proper supervision, the permanent and stable operations of funds should be secured.\(^{18}\)

**Rastin Personal Security (RPS)**

Rastin Personal Security (RPS) practically introduces a complementary process for social security and retirement. In addition to providing proper background for investment by pension funds, the main application of this system is summarized as follow:

1. Providing the second pillar for multi-pillars pension systems.
2. Providing the third thrift pillar for everybody (employed or non-employed).

In order to differentiate between mandatory and voluntary pension systems in Rastin Personal Security, hereafter, we use the terms “security fund” and “retirement fund” for mandatory and voluntary funds respectively. The term insurance premium will be used in mandatory systems and deposit will be used in voluntary systems.

Pension fund is an independent legal entity that operates under the titles such as fund, institute, and organization and so on according to law, articles of association or special instructions, in fulfilling pension defined benefits (DC) for members. Pension funds are of two types:

1. Security fund that operates under the mandatory social security laws.
2. Retirement fund, which operates voluntarily to fulfill pension needs.

In RPS, pension fund (security fund or retirement fund) as the agent of employed or unemployed (insured/depositor) invests the accumulated fund received from insurance premium/deposit in PLS bank. Bank issues Rastin Certificates\(^{19}\) against receiving deposits of pension fund. On the other side, fund requests bank to issue Security Certificate in the name of depositor/insured equal to his deposit/insurance premium paid. The issued certificate is regarded as the share of insured/depositor from the capital of the fund.

Here we define the two types of Rastin Certificate as “Social Security Certificate” and “Personal Security Certificates”. Both these certificates are issued in the name of person who pays insurance premium/deposit. Social Security Certificate is included in the second pillar of multi pillars retirement system and therefore, it is called “Social Security Certificate”. Personal Security Certificate is the third pillar of multi pillars pension system, which considers personal account, or self-insured saving thrift plan, therefore, it is called “Personal Security Certificate”. Social Security and Personal Security Certificates have their own characteristics.

Rastin Security Certificate includes Social Security Certificates, Personal Security Certificates and Pension Certificates (transformed form of Personal Security Certificate to pension payments). Similar to other Rastin Certificates, Rastin Security Certificates are issued as negotiable assets at banks’ Rastin Certificate Market websites. The owners of these certificates can transact them via internet network or bank counter and therefore, they can be transacted internationally.

Security/pension funds obtain commission for administrative costs from depositor or insured in issuing certificates according to instructions. These costs are in addition to operations and supervision costs on investment projects defined in PLS banking.

Regarding the defined techniques and procedures, risk study, actuary calculation and supervision of these funds are important. Actuary calculations should visualize the future years' flow of funds clearly and observe international standards. All activities will be carried out according to instructions, structure and organization of Rastin PLS banking.


\(^{19}\) Rastin Certificates are a collection of certificates designed and issued in the base system and financial subsystems of Rastin PLS banking. Supervisory feature of the trustee unit of the PLS bank on these certificates, distinguishes them from other financial papers and have prefix of "certificate". Being nameless, negotiable in secondary virtual Rastin Certificates Market, having market price based on supply and demand of certificates, settlement at the time of participation period by the last certificate holder are some characteristics of Rastin Certificates. Settlement of these certificates are carried out under the supervision of the trustee unit of PLS bank.
Social Security Certificate Process

Social Security Certificate is based upon the necessities and obligations of social security system of country and is classified in the domain of mandatory pension pillar in which the insured persons and employees pay a percent of employers’ earning to social security fund to receive Social Security Certificate. In this case, the payer is the insured person and will be included to receive pension after retirement according to laws and regulations. Pension fund is governmental or under the supervision of the government. Regulations of these funds are those in prevailing laws and regulations of country. These security funds can sell their Rastin Certificates in the Rastin Certificate Market. Security fund will pay pension according to the share of the owner of certificate considering actuary calculations. Financial management and the share of each person will be carried out according to "Variable Capital Joint Stock Company" regulations. Special regulations and mandatory insurance should govern the transaction of these certificates for securing pensions of employees during retirement. Mandatory insurance regulations define regulations concerning transaction of Social Security Certificates. This process is depicted by figure 1.

Social Security Certificate is an anonymous or named document with defined nominal price issued and for a certain period given to the insured person by Rastin PLS bank on behalf of the security fund in exchange for payment of insurance premium to the security fund. The holder of this certificate shares the fund capital proportionate to the value and shares the fund returns proportionate to the value and duration of his certificate according to mandatory social security regulations and laws.

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Figure 1

20 Rastin Certificate Market is a web-based settlement system for transaction and transfer of Rastin Certificates and Papers of Rastin bank.
Personal Security Certificate Process

Personal Security Certificate is voluntary. People arbitrarily may pay pension fees to a retirement fund and receive Personal Security Certificate and after a certain period which is defined in the certificate, receive back his payments in addition to the profit of the share in the fund (not in bank financed projects). In contrast to Social Security Certificate, Personal Security Certificate does not necessarily leads to obtaining pension payment; however, its principal and profit can be exchanged into several pension payments at the end of contract. In this case, retirement fund can be private or governmental institute. Anyhow, it should be under the supervision of a governmental organization such as Welfare High Council for Social Security. People can negotiate their Personal Security Certificates in Rastin Certificate Market. These certificates have a maturity date and after that, the owner can apply to the fund and receive back his principal and the earned profit. His participation in the fund is considered as a full sharing in activities of the fund. Therefore, he will share in the profit and loss of the fund proportional to his share and period of sharing. Fund is obliged to deposit her resources in Rastin PLS banking activities. For each deposit, bank will issue Rastin Certificate in the name of the fund and fund asks bank to issue Personal Security Certificate in the name of depositor on behalf and responsibility of the fund. Management approach and the share of participation of people in the fund will be according to Variable Capital Joint Stock Company regulations. The calculating profile of the share of each shareholder is at the end of each month. The profit received by the depositor is from total diversified activities of the fund and therefore, he will not face the risk of one single project. The owner of certificate can apply to the fund and receive the principal and profit of his deposit at maturity. The minimum maturity date will be five years after depositing date. People can deposit in several times according to their desire and receive Personal Security Certificates. This process is depicted by figure 2.

Personal Security Certificate is an anonym or named document with defined nominal price and maturity, and is issued by Rastin PLS bank on behalf of the pension fund for depositor by the request of the pension fund and equal to the amount of the deposited deposit. The holder of this certificate shares the capital of the fund in proportion to his deposit and shares the return of the pension fund proportional to the amount and duration of the deposit and receives his share (principal and profit) from the fund at maturity.
Pension Security Certificate Process

If depositor or the owner of certificate does not want to receive back his share from the fund in lump sum, at maturity he can ask the fund to change his certificate into several smaller certificates with continual maturities via the agent bank. Then he can apply to the bank after each maturity and receive a flow of income, which consists of his principal and the profit. In fact, these certificates are similar to personal security coupons. On the other hand, depositor can ask the fund to pay him at different maturities. The share of depositor at each maturity date will be calculated according to Rastin Accounting procedures for Joint Stock Company with Variable Capital (JSCVC) regulations. Pension Security Certificate like other Rastin Certificates is negotiable at Rastin Certificate Market. By settlement of each certificate, its serial number will be closed at Rastin Certificate Market website.

Pension Security Certificate is an anonymous or named document, which is issued from changing the share of depositor into several small lots at maturity, so that the holder can receive continuous pension payments from the fund.

Joint Stock Company with Variable Capital

Variable Capital Joint Stock Company\textsuperscript{21} is a company where its capital varies by entrance or exit of shareholders. This company can be governmental, private or mixed. Its operational features are

compatible with the definition of Non-Usury Bank Company (NuBankCo)\(^{22}\) and from financial operation are compatible with the third Rastin PLS banking product of bank participation. In fact, Variable Capital Joint Stock Company is a company in which the amount of capital is varying and the shares of shareholders are calculated at predefined time intervals.

Consider Variable Capital Joint Stock Company as a company established among shareholders whose capital is shared according to the members' own capital and durations of participation. The capital of the company can vary from time to time and is equal to the total shares weighted (proportional to) the number of days shareholders keep their shares in the company. Assume the number of shares equals to the number of days the shareholders have kept the nominal value of each unit of share in the company. In this company, all shareholders own the capital (and profit or loss) of the company proportional to their original capital weighted by the time they have hold their capital in the company.

**Stages of Rastin Personal Security**

1. Depositors accumulate their resources in a pension fund and receive Rastin Security Certificates (Social/Personal) via agent bank (and not from pension fund).
2. Bank introduces confirmed assessed project proposals\(^{23}\) of assessment unit\(^{24}\) of the bank to pension fund. By buying Rastin Certificates related to the confirmed proposals of the bank, pension fund, similar to other bank's depositors, provides the necessary fund for sharing with entrepreneur's projects under the supervision of trustee unit\(^{25}\) of the bank.
3. By receiving the funds from the pension fund, bank issues Rastin Certificates according to the selected projects.
4. The nominal values of Rastin Security Certificates are predetermined by bank.
6. Pension fund can negotiate his Rastin Certificates in Rastin Certificate Market.
7. At the end of each project, after deduction of commission, bank will pay the profit to pension fund.
8. Participation of the pension fund and the bank is in various projects and at the end of each project the sources will be settled with the fund.
9. Operational activities of entrepreneur in connection to the pension fund are carried out by entrepreneurs under the supervision of trustee unit of PLS department of the bank.
10. In order to decrease probable risk of financial activities and to ensure confidence for the parties engaged in RPS, if possible and confirmed by assessment unit of the bank, this unit will oblige insurance coverage of the project.
11. For the virtue of carrying out obligations by entrepreneur in RPS, bank obtains proper guarantees and collaterals from entrepreneur on behalf of the fund.
12. Bank on behalf of depositors/insured does not ask for collateral from the pension fund in lieu of payment of pension fee by depositors or insured persons. The pension fund is directly responsible to depositor/insured for the received resources.
13. In relation to depositors and fund, bank has only the role of agent to issue Rastin Security Certificates.
14. Contracts between the fund and entrepreneurs are according to the regulations of base system of


\(^{23}\) Proposal is a written document covering a collection of necessary information about the proposed project that describes analytical justification of the project from economic, technical and financial points of view, with enclosed necessary legal licenses and documents; which is submitted to Rastin PLS bank by entrepreneur. After evaluation of the bank if be approved, proposal will be a reference source against entrepreneur executive operations.

\(^{24}\) Assessment unit is a unit in PLS department of Rastin PLS bank which assesses the competence and capabilities of entrepreneur and his proposal.

\(^{25}\) The trustee unit is a unit at PLS department of Rastin PLS bank for supervision and control of Rastin PLS proposed projects on behalf of bank regarding good performance of project in comparison to initial proposal through key indicators and financial reports and supervision for final delivery of the project.
Rastin PLS banking and its financial subsystems if applicable.

15. By considering the applied concepts of Rastin PLS banking, the tasks of all parties of contracts, the necessary structure, organization and instructions will be in accordance to the regulations of Rastin PLS banking.

Conclusion

Social security systems around the world are highly inefficient. Rastin Personal Security (RPS) designed to remove this problem. RPS separates the authority of pension funds and put each part of it in a different institution (bank and fund). Designed executive mechanism is in a way to cause clear financial operations with less malfunctioning and corruption. RPS works under Rastin PLS banking and through this channel benefits from all instructions and structure of this type of banking that in turn will increase the efficiency of both governmental and private social security systems. The system is completely adoptable with all countries.

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