1 Four phases of the life-cycle

1.1 Learning outcomes

After studying this text the learner should / should be able to:

1. Describe the phases of the life-cycle of the individual.
2. Elucidate the codes / rules that pertain to each phase of the life-cycle.
3. Discuss the other codes / rules which apply throughout or during part of your life-cycle.

1.2 Introduction

In this text we present four main sections:

- Four phases of the life-cycle.
- The financial system.
- Investment instruments.
- Investment principles.

The following broad categories and subcategories of investments exist:

- Ultimate investment instruments:
  - Financial investment instruments (issued by ultimate borrowers):
    - Debt instruments.
    - Share (aka stock and equity) instruments.
- Real investments:
    - Property (also called real estate).
    - Commodities.
    - Other real investments (art, rare coins, antique furniture, etc.).
- Indirect investment instruments (issued by financial intermediaries):
  - Issued by banks: deposit instruments.
  - Issued by quasi-financial intermediaries: debt instruments.
  - Issued by investment vehicles: participation units/interests.

We will discuss them in some detail. As the majority of portfolios are made up of financial investments, we pay special attention to the financial system from which they spring. In the last main section, we discuss issues such as the objective of investments, the relationship between risk and return, and portfolio management. We also touch upon the investment theories and extract from them the tried and tested principles of investments, such as diversification, the valuation of assets, and so on.

The above is of little use if one does not have investments. Only a small percentage of people (some studies say 6–10%) reach their financial security goal (FSG), and are able to replace formal work with other activities. For this reason we present upfront a discussion on the life-cycle, i.e. the four phases of life and the "rules" of the four phases that should be followed in order to achieve your FSG at an appropriate age.

There is a body of literature labelled *life-cycle theory of consumption*. Its genesis was in the 1950s and its champions were Franco Modigliani and his student Richard Brumberg, as expounded in papers published in 1954 and 1980. In essence the theory postulates that individuals make intelligent choices on the volume of their spending at each phase of their lives, and this is constrained only by the financial resources available over their lifetime. They tailor their consumption to their needs over the phases, independently of their income, and in so doing build up and deplete a portfolio of assets during their lives enabling them to live the last part of their lives ("retirement") sans recurring income from labour. This simple theory leads to important predictions about the broader economy.[1]

The reality is that few individuals are able to reach their financial FSG, and the majority are dependent in the last phase of their lives on sources of income unrelated to themselves (usually their children / friends / government social security). We define "reaching your FSG" as building a portfolio of assets during the labour (income-earning) phases to a size that will sustain the individual and his/her dependent/s during the non-labour phase ("retirement"). Some individuals wish to reach their FSG early at, say, 40 years of age, while others wish to pursue an occupation until they are no longer able to.[2]

The above can be put another way: individuals have a life-long budget constraint and endeavour to spread income earned during the labour phases over their remaining lifetime. This means that part of consumption is deferred during the labour phases; and the degree of deferring affects *when* the FSG is attained. Financial assets represent the vehicles for transferring consumption to the future, and financial liabilities (loans) are the vehicles for transferring future consumption to the present.

Thus, there are many choice-variables over the life-cycle, and they include:

- Income from labour (how to maximise it; how to guard / insure against disability / death).
- Expenditure / consumption (how to minimise; shift part to the future).
- Saving and building a portfolio of assets (the above apply in terms of how quickly; how to mix risky and risk-free assets = asset allocation decisions in various phases; how to hedge against inflation and contingencies).
- Debt / loans (the extent to which one is able to fast-forward "consumption" – here meaning the purchase of an essential asset, a dwelling).

A well-known statistic (of a large life assurance company) is that less than 10% of individuals reach their FSG. The reasons for this poor state of affairs are many, and they relate to neglecting the obvious *codes* or *rules* of behaviour [financially and otherwise (which affects the former)] which should be followed over the phases of their lives.

This text does not expound on the life-cycle theory; rather, it endeavours to postulate the *codes* or *rules* of behaviour (financially and otherwise) to be adhered to over your life-cycle. This is followed, in subsequent texts, by various related subjects (such as *risk and return* and *asset valuation*) that form an introduction to investments. *Investments* are of course irrelevant if you do not follow the codes / rules, because you will not have a portfolio of assets. If you do, having an understanding of investments cannot be overemphasised, even if you outsource the management of your portfolio.

It will be evident that individuals require three forms of security:

- Personal security.
- Health security.
- Emotional security.
- Financial security.

The financial security goal (FSG) is at the forefront of people's minds (or should be), and can only be achieved by following the rule that income must *always* be greater than expenditure ($I > E$). Debt can be part of the equation but only to the extent that debt is undertaken for good reasons (such as the purchase of a home) and that debt servicing (i.e. interest payments) is incorporated into E such that the condition $I > E$ prevails. It will be evident that savings (S) is the outcome of $I > E$, and therefore that $I > E = +S$, and that the achievement of one's FSG at an appropriate or desired age is a function of maximising I and minimising E.

Because of our physiological and psychological hard-wiring and our environment, there is a pattern to our lives: we are born (0 years), nurtured and educated by our parents, expelled from home at 20+ years of age, undertake a career in order to survive, choose a life partner, have children who need nurturing and education (who are then ejected from the nest when we are 40–45), get too old to work effectively at 60+ years of age), and then depart for Heaven (some believe) at 80+ years' of age. We therefore have four phases to our lives:

- 0–20 Newborn to adulthood.
- 20–40 Adulthood to maturity.
- 40–60 Maturity to seniority.
- 60–80+ Seniority to exodus.

These phases are approximate because each person has a different life-script. Each phase has distinct characteristics / needs / desires and which need to be recognised, accepted and managed – especially in respect of our financial life – if you are to reach your FSG at a desired age.

Figure 1 portrays the ideal financial scenario for achievement of your FSG. It is self-explanatory. Below we discuss the "rules" of each phase.

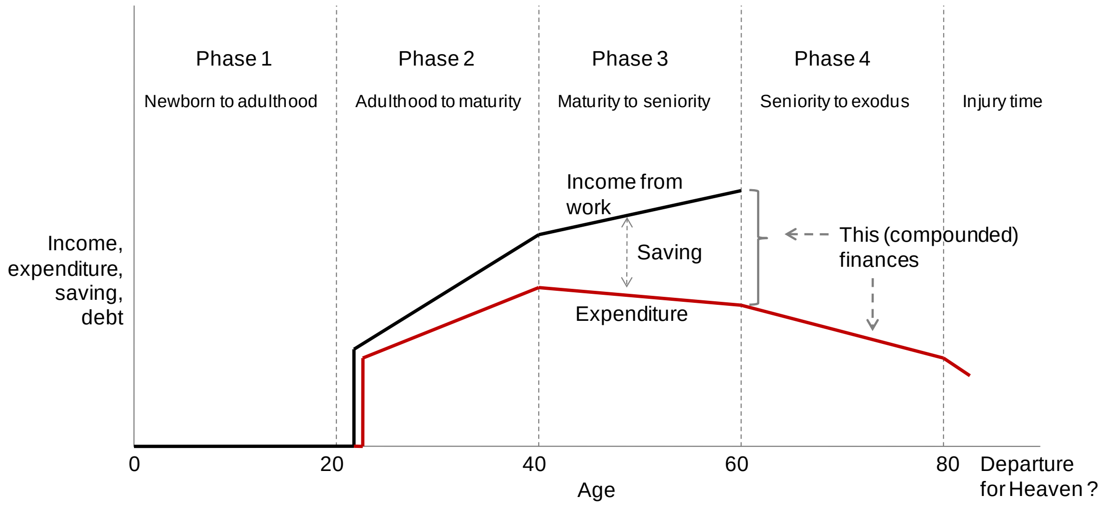


Figure 1: four phases of life

1.3 Phase 1: newborn to adulthood (0–20)

1.3.1 Introduction

This phase has been called "creating capacity"[3] and "becoming somebody"[4]. It is the phase over which you have little control (except in the latter part). You cannot choose your parents, so hopefully you will have had good parenting. What is good parenting? It is providing the child with a solid foundation for the life s/he will build for himself/herself. What are the rules for providing children with a solid foundation? They can be summarised as follows:

- Read up on the cognitive development stages of offspring.
- Promote a rock-solid emotional backbone.
- Provide sound education inside and outside institutions of learning.
- Programme the child's mind to be an inquiring one.
- Promote an ethos of sound money management.
- Drive home the philosophy that wealth has two legs: monetary and non-monetary.

1.3.2 Read up on the cognitive development stages of offspring

Raising one's offspring is centred on learning: from parents, the environment and institutions of learning. While the latter are the authorities on "when the child leans what", the parent usually is not. Therefore, it is important to have an understanding of the cognitive development stages. Jean Piaget[5], a development biologist, devoted much of his life to the cognitive (i.e. learning, in the widest sense) development of infants, children and adolescents. He identified four stages, now known as the four stages of Piagetian development:

- Sensory motor stage (aka Sensorimotor stage) (0–2 years).
- Preoperational stage (2–7 years).
- Concrete operational stage (7–11 years).
- Formal operational stage (11–adulthood).

Sensorimotor stage (0–2 years)

Infants are "ego-centric": they are not able to consider others' needs, wants or interests. They acquire knowledge about objects and the ways that they can be manipulated, and begin to understand how one thing can cause or affect another. They also begin to develop simple ideas about time and space.

Preoperational stage (2–7 years)

Children's thought processes develop in this stage, although they are still considered to be far from "logical thought", in the adult sense of the word. The vocabulary expands and develops during this stage, and they change from babies and toddlers into "little people".

A characteristic of this stage is "animism": when a person has the belief that everything that exists has some kind of consciousness. An example: when a child runs into a piece of furniture s/he will punish it, because it behaved badly in that it hurt them. They tend to assume that everyone and everything is like them; therefore, because they feel pain and have emotions, everything else does too.

Children start this stage as "ego-centric" but gradually a certain amount of "de-centering" transpires.

Concrete operational stage (7–11 years)

During this stage, the child's thought process becomes more rational, mature and "adult-like", or more "operational", and often continues well into the teenage years. Belief in animism and ego-centric thought tends to decline (although remnants are often found in adults). They are able to evaluate the logic of statements by considering them against concrete evidence only.

Formal operational stage (11–15+ years)

In this stage adolescents are able to reason beyond a world of concrete reality to a world of possibilities, and to operate logically on symbols and information that do not necessarily refer to objects and events in the real world. They can focus on verbal assertions and evaluate their logical validity without making reference to real-world (concrete) circumstances.

1.3.3 Promote a rock-solid emotional backbone

The second rule is the promotion of a rock-solid emotional backbone[6]. It is reflected in a high level of self-confidence and self-esteem. Providing a child with this life asset is firmly in the hands of parents and is a result of many factors, including the frequent expression of unconditional love, acceptance of the child as s/he is, and creating a sense of personal security.

1.3.4 Provide sound education inside and outside institutions of learning

The third rule is to provide children with a sound education inside and outside institutions of learning. Outside of academia (i.e. at home) parents should promote / encourage:

- Achievable personal standards: encourage achievements to the best of the child's abilities, and not beyond. Do not compare the child to other children[7].
- A strong sense of self-reliance and responsibility.
- A balanced life: exposure to sport and art, in addition to academics.
- A sound moral compass.

The latter is imperative, and includes the sound values of integrity and honesty. From a young age the child should know that integrity moulds ones personal brand, and that only the truth can be recalled (lies cannot).

1.3.5 Programme the child's mind to be an inquiring one

The fourth rule is to encourage children to have a life-long enquiring mind. Children need frequent parental contact and stimulation from birth. In the *preoperational stage (2–7 years)*, usually at ages 3–5, a child's mind is developed to a stage where s/he is highly stimulated by his/her environment, as reflected in the rapid-fire numerous questions put to parents.

A life-influencing, crucial error made by many parents is to discourage the questioning (a result of possible irritation) or to provide meaningless answers. It is critical to answer questions well, to consult encyclopaedias when one does not know the answer (which must be done with the assistance of the child), and to encourage further questions.

Reading from an early age is to be strongly encouraged. It helps them to develop important language and communications skills, logical thinking, gain new ideas and concepts, and creates a predisposition for further learning.

1.3.6 Promote an ethos of sound money management

In the formal operational stage (11–15+ years), in the context of pocket money at this stage, begin to promote an ethos of sound money management, particularly $I > E = +S$, and that S means delayed consumption, creates possibilities, and gives one peace of mind.

1.3.7 Drive home the philosophy that wealth has two legs: monetary and non-monetary

The sixth rule is to drive home the philosophy that wealth has two legs: monetary and non-monetary. Monetary wealth is obviously important, but so is its non-monetary companion. Non-monetary wealth is manifested in having close family and friends and in good general interpersonal relationships. This feeds into a successful career, which feeds into financial security (provided sound money management is in place) and this is an important input in the emotion happiness (aka subjective wellbeing).

As the reader of this text is most likely a young adult, who had limited or no control of phase one, why do we mention the above here? The reasons are:

- You are partly in control. You decide on your education and the extent to which you prepare yourself in this regard for the next phases. Interpersonal relationships are also in your ambit of control. Also, you do have an "income" (usually a parental allowance), which enables you to get going on the ethos of sound money management ($I > E = +S$).
- You will most likely have children one day; in fact you are hard-wired to procreate, i.e. to propagate yourself and your partner. It is difficult to resist the urge despite the hardship and expense involved in raising children.
- Your success in your career and your personal finances in later life reflect your self-confidence and self-esteem built in this phase. If this life asset was not properly established in this phase, it is advisable to seek professional help from a psychologist.

A wealth management company, Citadel, recently undertook substantive life-phase research amongst their clients. The outcome was that all the clients taken on had been good-parented. Many of them grew up in financially modest circumstances, but were imbued with emotional security.[8]

1.4 Phase 2: adulthood to maturity (20–40)

1.4.1 Introduction

This phase has been called the "rollercoaster"[9] and the "high-speed low-wisdom"[10] phase. It could also be called the "make or break" phase of your life. Your personality is established and your basic education is in place. You will leave home and are now in control of your own life. You will almost certainly choose a life partner / spouse and have children. This is also the phase when your income rises at the fastest rate – provided you follow the tried and tested "rules of the game". The "rules" are:

- Choose your career with care.
- Undertake one career and become accomplished at it.
- Undertake lifelong continuing education.
- Choose your life partner with care.
- Nurture your health and family life.
- Underspend.
- Insure your life only
- Take on debt, but with much thought.
- Do not bow to peer pressure.

1.4.2 Choose your career with care

Analyse your personality profile carefully (or have it done professionally), acknowledge your strengths and weaknesses, and match them with your career. A career is an employee-position (e.g. a bank employee), a profession (e.g. a lawyer) or a business (e.g. manufacturing plastic products, including vuvuzelas). Because this is probably the most important decision of your life, and it will occupy you for 40+ years, it *must* resonate with your passion/s.

1.4.3 Undertake one career and become accomplished at it

Assuming you have discovered your passion, undertake *one* career and have as a goal to be the best at it. Because you are not able to manufacture more time, and because you have one quantity of energy, focus all your attention on your one career and be jealous of your time. In this phase of your life you will be tempted to coach rugby and serve on the school board; these deserving activities divert your attention. Put them off until phase three when you will have the time.

If you are an entrepreneur with your own business, you are by definition a risk-taker. Take risk only in this phase because you can make up losses, a luxury which you do not have later in life.

If your career is, for example, a bank employee, set your sights high because you can do exceptionally well financially as an employee. Remember the following:

- The job must accord with your abilities and personality.
- Do not for a moment think that you do not have risk; risk exists in that you can lose your employment.
- It is advisable to regard your job as a one-man (your) business and that your salary is the settlement of an invoice you issued to your employer for services rendered by you. This will make you serious about your job.
- Respect your owner-employer; s/he is the principal risk-taker in the business.
- Because you have to be at work in any case, work diligently, be punctual, go the extra mile, find solutions to problems, and be a team-player.

1.4.4 Undertake lifelong continuing education

Your education does not end with obtaining a first degree or diploma. Your career requires investment in all its aspects, in the form of formal (further degrees, diplomas) and non-formal education. The latter entails being a good listener of the opinions of others who are more experienced, reading and travel. Your goal should be to be the most informed of any person in the industry. General knowledge, gained from wide reading of non-fiction, makes you an engaging person, which is an essential ingredient of success in your business / job and your personal life.

Read only non-fiction in this phase (fiction can enjoyed when you have achieved your FSG), i.e. stay up to date with developments pertaining to your career and with your country and world developments. Observe and understand your world. Engage in dialectical interaction. This means debating, which must always be non-confrontational: stating a thesis (hypothesizing), listening to an offered anti-thesis, and synthesizing a new thesis. This is true open-minded learning and makes you an engaging conversationalist.

1.4.5 Choose your life partner with care

You are "wired" with the emotion "love", to be attracted to another person, to marry that person, and to have children (usually). With marriage, you sign the most significant and enduring contract of your life, and you live with this other person for 50–60 years. This other person is an individual who has opinions, passions and idiosyncrasies often different from your own. The divorce statistics indicate that most marriages fail.

An unhappy spouse and a divorce can affect your career, your finances and your offspring in a devastating fashion. In many cases divorce leads to a doubling of expenses (two homes) and a halving of income / assets. The consequences for your FSG can be profound.

Given the high price of housing and good education, it is more usual that both partners / parents are in employment / own businesses. It is therefore important to choose a life partner who is well educated. This is especially the case when one considers the possibility that one of the partners / parents may pass on or become disabled. This also has implications for life insurance (covered below).

1.4.6 Nurture your health and family life

This rule ties in with being jealous of your time. You only have a certain quantity and quality of energy. You need to undertake a life-long programme of maintenance of your energy level by participating in a physically-demanding sport. A fit person is a competent co-breadwinner / breadwinner.

Your career and sport take up time and what is left over should be devoted to your spouse (a good marriage demands effort) and children in their required nurturing. For these reasons avoid at all costs becoming a workaholic, because work can become addictive. A good balance between your career, sport and family life makes you a better spouse, parent, friend and colleague. A person who consistently spends eighteen hours a day at work is being irresponsible. It is incongruous that workaholics boast of this attribute.

1.4.7 Underspend

The personal finance equivalent of the property market's axiom "location, location, location" is "underspend, underspend, underspend" and this should become a lifelong mantra. While there are many demands on income, it is essential to start off this phase with an $I > E = +S$ approach. Underspending should become a persistent financial state because it facilitates attaining one's FSG at an earlier stage. The rule of thumb is save 20% of income. The condition $I < E$ leads to ruin.

1.4.8 Insure your life only

Part of underspending is to avoid overinsuring. Some insurance saleswo/men will pressure you to purchase many different policies, because they are usually remunerated on a commission basis and/or their bonuses are a function of their targets. There is a need for pure life/disability insurance, house insurance, house debt insurance, and possibly car insurance, but avoid the rest. Your priority in this phase (and the next phase) is to repay debt as quickly as possible (see next section).

As to the extent of life/disability insurance: you will have a spouse and children; insure against debt, and your life / your disability, for an amount that is sufficient to cover household expenditure until your spouse is able to provide for them. The latter is dictated by the ages of your children and the level of education of your spouse; your spouse may need to advance his/her education in order to better provide for the children and him/herself.

Pure life insurance is termed *risk life assurance* (RLA), and it is differentiated from policies which combine RLA and investment assurance. The reason for separating RLA and investments is that your investment and RLA requirements change as you age.[11] Generally, as you age and your assets increase your RLA needs decrease. It can be expensive to change combination policies, whereas there are no penalties for cancelling RLA policies.

There are various RLA policies, including[12]:

- Whole life assurance.
- Term assurance (increasing, decreasing, convertible).
- Credit life assurance (covers debt).
- Joint-life assurance.
- Disability assurance.
- Impairment assurance.
- Critical illness / dead disease assurance.
- Terminal illness assurance.

1.4.9 Take on debt, but with much thought

You need a home and a vehicle and you will need to incur debt to acquire these (see Figure 2). It is important to ensure that the debt service (i.e. interest) amount, which is part of E, is such that the condition $I > E$ is upheld.

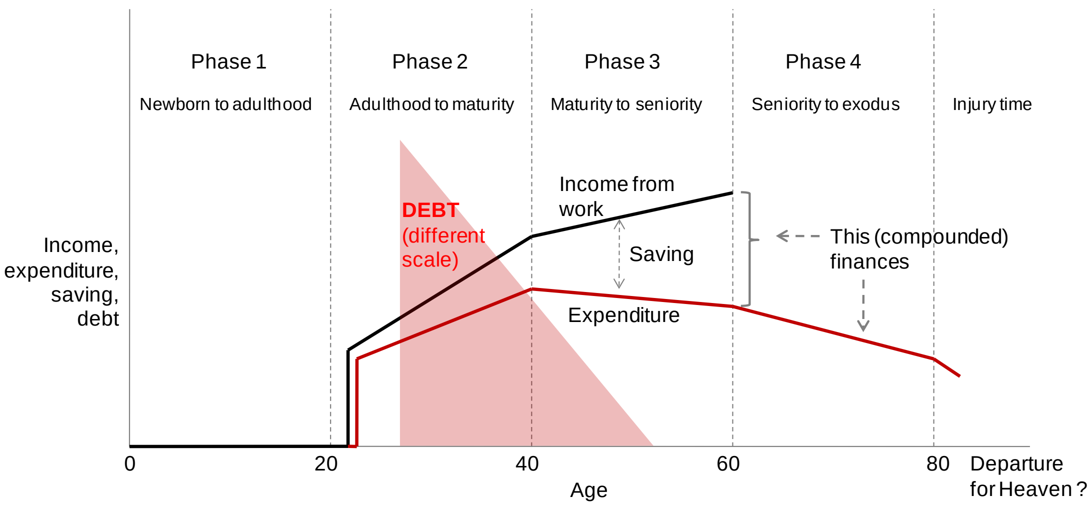


Figure 2: four phases of life

It is wise to live in a modest home and drive a modest car, because this keeps *E* at a low level. If there is a comfortable excess (*S*) over time, repay debt at a faster pace. If you have a business, borrow only if your business plan is sound, and reduce the debt asap. If you are an employee and are offered shares / options, sacrifice income or borrow if this is the way to buy the company shares or share options. However, only do so if you and your colleagues "believe" in the business. In these ways assets are built.

At all costs avoid buying lifestyle assets with borrowed money, even if *E* can accommodate the additional debt servicing cost. Rather repay your mortgage debt at a faster pace. Keep in mind that owning a boat or a holiday house is not wise; they can be hired and *E* will be lower and *S*+ higher.

1.4.10 Do not bow to peer pressure

Do not be influenced by your peers; in fact set the (modest) standard for your peers and friends. You will be surrounded by peers, and many of them will have impressive visible assets, such as a large home and expensive vehicles, as well as lifestyle assets such as a boat and a holiday house at the seaside. Many of them will also take their families on expensive overseas holidays. Keep in mind that the visible assets are the asset side of the balance sheet, and that the liability side, which funds the asset side, is invisible.

Bowing to peer pressure is especially rife in the professional fraternity, and many of them are obliged to continue in their professions until a late age. This is not a pitiable situation (because it is advisable to remain active), but it is most satisfying to have the option to live off savings. By all means have a comfortable lifestyle, and acquire lifestyle assets, but only when you can comfortably afford them.

1.5 Phase 3: maturity to seniority (40–60)

1.5.1 Introduction

This is sometimes called the "consolidation"[13] phase. It is the phase when the children leave home and, as shown in Figure 40, your expenditure falls while your income continues to increase, but at a lower rate. This is so because your business will most likely have reached maturity and is highly profitable by this stage, or you will have advanced well as an employee – in many cases to close to the top of the hierarchy.

This of course assumes that you followed the rules that pertain to phase 2. Consequently, it is the time when gap between *I* and *E* increases and you will be saving more than the amounts possible in phase 2. Your FSG is getting closer and you are in a position to ensure that you will reach it in this phase, provided you follow the rules that pertain to this phase:

- Nurture and exploit your personal brand.
- Aggressively repay debt.
- Cash out and separate business risk from personal assets.
- Invest assets wisely.
- Finance lifestyle assets with excess funds.

1.5.2 Nurture and exploit your personal brand

At the start of phase 3 you will have built a personal brand – either as a business person, a professional or an employee. It is the most valuable of all non-monetary assets and should be used to propel you to the top in your chosen career. This will ensure that *I* will continue increasing at a time when *E* is falling, and this will enable you to repay debt.

It is important not to fall into the trap of arrogance which could quickly destroy your brand and your wealth in phase 3. Success in phase 2 leads many people at age 40+ to believe too much in themselves (invincibility!); this arrogance affects decisions on risk-taking and expenditure detrimentally. Rather attempt to identify arrogant people with the purpose of avoiding them.

1.5.3 Aggressively repay debt

Higher *I* and lower *E* will put you in a position to repay debt at a faster rate (see Figure 2). It is likely that you enter this phase with a large outstanding mortgage bond. The highest return you can get on savings is in the share market: in the long term it delivers a *mean* return of over 12% pa; as you know this return is accompanied by risk (= variability of return around the mean). If your debt is costing you 12% pa and you apply all your savings to paying off your bond you are "earning" 12% pa *without any risk*. It is a superior deal. In fact, given the risks in the share market, it pays you to repay your bond even if the rate is 9.6% pa, because this can be called a *risk-adjusted rate* (RAR). If in the 12% share market the STD = 20%, the RAR = 9.6% pa.

This is also the phase when your parents pass on and leave you an inheritance (if they have not SKI'd[14] it away). Regard this money as a windfall and use it to repay debt.

It should be a rule that at age 45–50, all debt should have been repaid. Given a sharp increase in net assets in this period there will be temptations (from the bank and peers) to buy lifestyle assets; avoid them.

1.5.4 Cash out and separate business risk from personal assets

During this phase your net worth will grow sharply and it is important to "cash out" a portion of your non-diversified assets and separate business risk from personal assets. How this is achieved in the different careers requires separate discussion.

If you are an employee with share options, cash out a portion and diversify (i.e. reduce risk) (more on this later). You should also be acutely aware in this phase that you are vulnerable. Downsizing of your employer-company in a recessionary period may lead to your retrenchment. This can be a serious setback to the timing of your FSG. You need to actively seek to expand the business of your employer by using your brand and wisdom, and recommending the employment of keen youngsters. The company owners will reward you with an extension of your working life. But you have to recognise that you must remain relevant. The company owes you a salary only if your earn it.

If you have a business or are a professional the separation of business risk from personal assets is achieved by, over time, identifying and handing the reins of the business over to youngsters with new expertise and energy. Your energy level will be lower than before and you need to recognise this upfront. Sell a portion of the business to them and sell more as you get older. Go back to your area of expertise in the company. The Bill Gates example is relevant; he handed over the reins and went back to his passion, software creation. The youngsters will respect you and most likely reward you with the chairmanship – but only if you have kept yourself relevant to the business. Thus, you will have prolonged your income-earning period.

1.5.5 Invest assets wisely

As you become a high net worth (HNW) individual and you have separated business risk from personal assets you will need to make decisions on investments. One of them is the choice of management of your money between self-management and external management. In the former case you will need to undertake extensive and ongoing research, which is extremely time-consuming. You should only consider this option when you have reached your FSG. However, the majority of persons who are successful in terms of their FSG use external management, which amounts to taking external advice. In this regard there are 2 options:

- Appoint a fund management firm (stockbroker or specialist firm).
- Invest in securities unit trusts (SUTs) and exchange traded funds (ETFs).

In the former case there are certain rules to follow, the most important of which is to choose the right manager, and this must be based on past performance. However, even excellent fund managers make bad decisions at times. For this reason it is good practice to implement the golden rule: diversification, i.e. choose 2–3 managers. The managers will in turn also diversify your investments. As you know this route takes advantage of low or negative correlations of return and reduces risk.

1.5.6 Finance lifestyle assets with excess funds

Most HNW people are tempted to buy a large motor vehicle, a larger home, a boat, a holiday house at the sea and take long and expensive holidays. Only consider these if you have reached your FSG and have excess funds. However, consider the facts:

- A larger motor vehicle is expensive to run and insure, and it is difficult (emotionally) to downgrade if you have to.
- A holiday home restricts one's travel options because you feel obliged to use it every year.
- A holiday home is a non-earning asset, i.e. a poor investment even if you can afford it. It is wiser to rent a holiday home each year and it enables you to diversify your travel destinations.

1.6 Phase 4: seniority to exodus (60–80+)

1.6.1 Introduction

This phase has appropriately been called "the sunshine years"[15]. The age of 60 is probably a good target for attainment of your FSG, because it is the age when most people's energy levels begin to wane, and they get the urge to exit their job or business and to play a sport fulltime, or to start a new career. This phase only starts when you have reached your FSG. Some people will start it at 60, while others will start it at 65 or even later. The rules for this phase are:

- Choose this day carefully and prepare yourself emotionally.
- Continue to invest assets wisely.
- Resist the Indiana Jones temptation to make a comeback.
- Do not lend money to anyone.
- Undertake SKI holidays.

1.6.2 Choose this day carefully and prepare yourself emotionally

The age at which you start off this phase is dependent upon your success during the past two phases. As indicated in Figure 40 income ceases at the start of this phase. Thus, expenditure is financed from one source: your portfolio (retirement fund and/or personal portfolio). It is important to note that while expenditure falls over time, it does not fall sharply. This is a result of medical expenditure rising, while normal consumption expenditure falls. If your portfolio is able to sustain your partner and yourself comfortably (which includes travel) you have reached your FSG.

If you are fortunate to have achieved your FSG, which you will know before the start of the phase is reached, it is imperative that you prepare carefully for a new life in the form of hobbies, sport or a new career for which you have never had the time. In the case of a new career, it is liberating to not have to earn an income. One rewarding prospect is teaching, i.e. to give young people the benefit of your experience and wisdom. If you do not prepare for this, it is likely that you will become depressed and depart life prematurely. There is an undisputed link between depression and cancer.

If you have not reached you FSG at age 60+, you will need to keep yourself relevant or re-skill yourself in a field appropriate to your experience. To be avoided at all costs is to invest your portfolio in risky assets (including a new business, such as a coffee shop or a fishing tackle shop at the sea).

1.6.3 Continue to invest assets wisely

It is even more essential to focus on investing assets wisely and to allow for bear markets. As noted, it is wise to take objective advice and not be emotionally involved with your investments. However, if you are well-schooled in the investment industry it is likely that you will embrace self-management. In this case you will need to make the broad asset allocation, and choose the investments in each asset class.

Let's examine an example: you believe that the economy is robust and that asset prices will increase. You have a mortgage-free home and do not think it wise to have any further investment in property (because property is an illiquid investment). You also wish to keep a proportion of your assets in bonds and in cash (= money market). You require diversification and liquidity. You decide upon a portfolio as presented in Table 1. (A note: the terms used here are probably unfamiliar; they are elucidated in some detail later.)

With this type of portfolio you have achieved the following:

- Diversification (across 85% of portfolio).
- Taken advantage of the highest return asset class which can be done at the start of the phase but should be changed as you get older.
- You have risk (in the share market) but it reduces as the investment horizon increases (you may have 20+ years ahead).
- Kept transactions costs low (ETFs instead of the shares/bonds underlying them).
- Liquidity (in all assets except property and other real assets).

Asset class	% allocation	Asset type	Diversification
FINANCIAL ASSETS			
Shares	65%	ETF: Top-40 Index	An ETF is diversified
Bonds	10%	ETF: GOVI Bond Index	An ETF is diversified
Money market	10%	3 money market SUTs & 3 bank deposits	SUTs are diversified; diversified across banks
REAL ASSETS			
Property	10%	Your home	No
Commodities	4%	Gold coins	No – because of limited options
Other real assets	1%	Antique furniture, art, rare books & stamps, etc	Yes, probably

Table 1: Example of portfolio

As one ages the risk profile of this portfolio will need to be changed: less in risky assets (shares) and more in risk-free assets (TBs and short-term government bonds).

1.6.4 Resist the Indiana Jones temptation to make a comeback[16]

There are many instances of people (wo/men of ego) who endeavour to "make a comeback" when retired. They have reached their FSG, and invest in one last venture, usually with the purpose of substantially boosting their HNW status and impressing their peers. Often this leads to financial disaster.

1.6.5 Do not lend money to anyone

When you have achieved you FSG it is likely that you will be approached by people, including your children, to invest in a "fail-safe" venture. When this happens place at the forefront of your mind:

- Your portfolio is sacrosanct.
- If you acquiesce your portfolio's risk and return risk characteristics will change in the direction of higher risk.
- Moral hazard rears its ugly head: easy money is easily squandered, especially by family, because there is no pressing need to repay / service interest.
- If the venture is viable (and it should be reviewed), bank funding is available; this is the banks' business, not yours.

1.6.6 Undertake SKI holidays

Spend the kids' inheritance. After almost half a century of dedicated work (accompanied by stress), when you have not relaxed much, it is time to learn to relax. When you depart for Heaven (some believe) at 80–90, your children will be retiring and probably not need to inherit assets.

1.7 Other rules which apply throughout or during part of your life-cycle

1.7.1 Introduction

One is able to identify many other rules that should apply in one's life. Here we list those we consider of major importance:

- Do not become dependent on the largesse of your spouse.
- Nurture relationships in business with like-minded people and avoid negatively-focussed people.
- Be quietly competitive.
- Be kind to people with humble stations (positions) in life.
- Read up on the undisputed "Out of Africa" theory.
- Pursue happiness.
- Have no regrets upon exodus.
- Undertake a lifelong love affair with macroeconomics and the political environment.

1.7.2 Do not become dependent on the largesse of your spouse

Many individuals become dependent upon their spouses in a financial sense and become enslaved – sometimes in an unhappy home. If your occupation is to nurture the children ensure that your marriage contract affords you equality in terms of the family assets. If you are career-orientated, resume your career asap or when the youngest child enters pre-school.

1.7.3 Nurture relationships in business with like-minded people and avoid negatively-focussed people

Beware of arrogant and narcissistic people; they are usually intelligent, articulate and persuasive. They journey through life with the attitude that the world owes them a good living, and ultimately destroy their lives. The first sign to look for is that they are poor listeners and never enquire about you and your family.

1.7.4 Be quietly competitive

You are hard-wired to compete for position in the hierarchy of business and personal life. Do it without fanfare, and never burn bridges (except with arrogant and narcissistic people) because you are bound to meet previous colleagues in the future. Some of them may be in positions that can have a bearing on your business life.

1.7.5 Be kind to people with humble stations (positions) in life[17]

You will come across people almost every day that are not as fortunate as you may be. Be cognisant of the reality that they may not have had the opportunities you had to better themselves. These people are generally treated with contempt or obliviousness. Mentally project yourself into space and look down on earth; this will make you realise that we are all diminutive and make only a small contribution to society. You have no reason, even (or especially) if you are well on your way to, or have already achieved, your FSG, to feel superior. Kindness begets kindness, joy and helpfulness (humble stations are usually service positions).

1.7.6 Read up on the undisputed "Out of Africa" theory[18]

The Out of Africa theory postulates that a small group of Africans left Africa 70 000–80 000 years ago and populated the world. There is ample evidence [archaeological, mitochondrial (female) DNA, phylogeographic, palaeontological, etc.] that the small group left what is now Ethiopia / Djibouti and crossed the sea (then at a lower level) into what is now Yemen. From there they spread across the world. It has also been suggested that human skins became lighter in colder climes because of the less harsh sunlight and in order to produce the body's required amount of vitamin D (which is produced by the skin).

1.7.7 Pursue happiness

Happiness is a choice, a state of mind influenced by myriad factors of which financial health is a significant contributor. Self-actualisation is the ultimate human accomplishment (according to Maslow) and can only be achieved with a strong financial state of affairs. In the next section we present a synopsis of a body of research on the life-cycle of happiness.

1.7.8 Have no regrets upon exodus

This rule fits snugly with the pursuit of happiness. It may seem an obvious one. However, what is not so obvious is the principal regrets people have during their last days on earth. An Australian palliative care nurse, Bronnie Ware, recorded the five principal regrets people have in their last twelve weeks[19]:

- "I wish I'd had the courage to live a life true to myself, not the life others expected of me." This is the most common regret of all, and is based on choices made resulting in many unfulfilled dreams.
- "I wish I hadn't worked so hard." Every male patient expressed this regret; they had missed out on their children's youth and their partner's companionship.
- "I wish I'd had the courage to express my feelings." Most people suppress their true feelings in the interests of keeping the peace with others, i.e. do not reach their potential and thereby settle for a mediocre existence. The consequence can be bitterness and resentment and possible resultant ill health.
- "I wish I had stayed in touch with my friends." Most people are so busy with their lives they lose touch with old friends; they miss these friends when dying.
- "I wish I had let myself be happier." As we stated above, happiness is a choice. Most people worry about the future, have a fear of change and follow their old patterns and habits, i.e. remain in their "comfort zone". This is reflected in their emotions and physical lives. They pretend to themselves and to others that they are content.

1.7.9 Undertake a lifelong love affair with macroeconomics and the political environment

As stated often before, undertake a lifelong love affair with macroeconomics and the political environment. These disciplines provide the framework for investments. Investment returns are driven by earnings and earnings are driven by:

- Domestic demand (DD) [= consumption expenditure (C) *plus* fixed investment expenditure (I) = gross domestic expenditure (GDE)].
- Net foreign demand (NFD) [= foreign demand for local goods (exports: X) *less* local demand for foreign goods (imports: M) = trade account balance (TAB)].
- The above make up the expenditure on gross domestic product (GDP).

Thus, the macroeconomy (i.e. the economy seen broadly) is represented by:

DD = C + I = GDE.
NFD = X – M = TAB
GDE + TAB = GDP (expenditure on).

1.8 Life-cycle of happiness[20]

What is happiness? It is a state of being expressed in many ways, such as psychological well-being, life satisfaction, emotional well-being, subjective well-being, and so on.

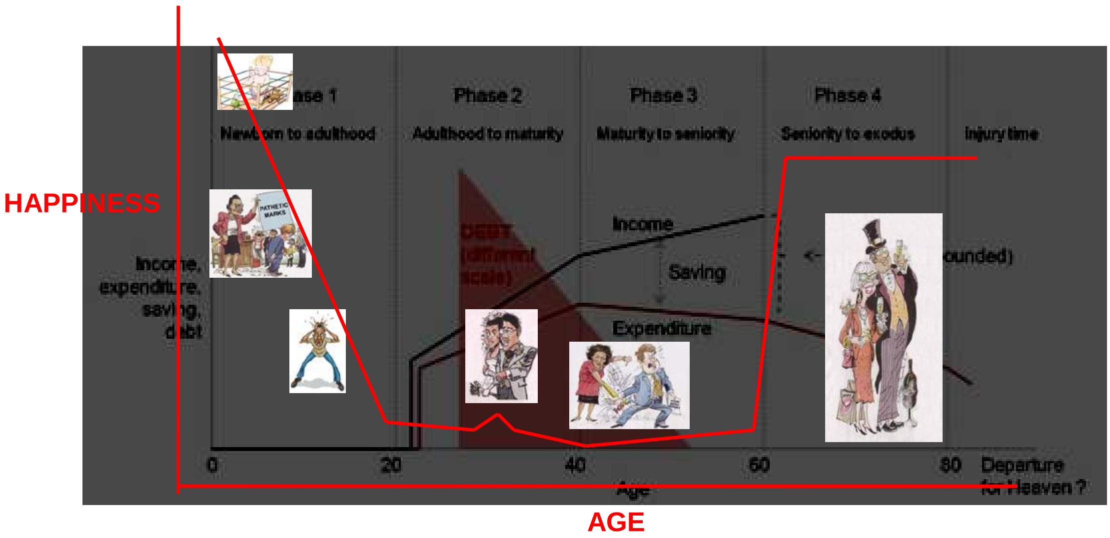
Most adults regard "life" as a long and slow decline from birth to death. What they mean is that people are happy as carefree / responsibility-free toddlers and teenagers, and then their degree of happiness declines over time, reaching what is called a mid-life crisis between 40 and 50. The degree of happiness then declines further until it disappears entirely (= misery) as old age creeps up, and this is so because old age is accompanied by physical ailments such as painful joints, failing eyesight, memory-loss, etc., as well as the happiness-killing thought of dying soon.

This is not the case; rather, research indicates that the happiness life-cycle is U-shaped (see Box 1: happiness cycle superimposed on the four phases). According to research there are four factors that impact on happiness:

- Gender. Women are slightly happier than men, but are more susceptible to depression.
- Personality. There are many personality types, with the extremes being neuroticism and extroversion. The former tend to be unhappy, because they are prone to guilt, anxiety, and anger, and they tend to be gloomy, and alone. The extroverts are the most happy, because they form relationships easily, enjoy parties, and take pleasure in working in teams.

- Circumstances. This factor includes relationships (linking with the aforementioned), education, income, health and probably the major circumstantial factors: *stress* and associated *worry*.
- Age. As we will see, age is a major factor in happiness, and that stress and worry, the major happiness-inhibitors, are age-related.

BOX 1: LIFE-CYCLE OF HAPPINESS



Illustrations: Colin Daniel, Independent Newspapers

In what follows an important assumption is made: people are emotionally secure, have a home, enough to eat, a good education, a career, good health, average income, and reach their FSG in their late fifties to early sixties. This leaves the main factors in happiness to be *age* and related *stress and worry circumstances*.

Certainly, babies, toddlers, and pre-teens are happy. This is because they have no responsibilities, except to pay attention later at school. Teenagers, however, have challenges and therefore stresses and worries: at school, at home, amongst peers, dating, at social events. Happiness declines under such pressures. This continues into early adulthood: at university or work.

Making a living can be rewarding emotionally, but it is usually associated with many stress and worry factors: competition for position, impacting on interpersonal relationships in and outside the work environment; postponing consumption to later (saving to reach the FSG); long working hours and associated tiredness; attending cocktail parties and entertaining (to remain part of the *network*); general anger at circumstances.

Happiness declines under these circumstances. However, there are events that give relief at the age of middle-to-late twenties: marriage, young children and friends. However, the children-factor pales after a while, as a result of the associated costs (largely unanticipated and therefore not planned for). This impacts heavily on savings. Children become teenagers, are generally angry, and challenge parents when they are at their most stressed-out stage: middle forties. Research indicates that the low point, sometimes called the *mid-life crisis*, is at median age 46.

Thereafter, stresses and worries remain constant for a while and ease later when the children grow up and leave home. This stage is associated with a higher disposable income and higher savings, bringing the FSG closer. The senior stage is reached thereafter.

As people move to senior years they lose vitality and mental sharpness, they have or will have ailments, and they lose their looks. They look grumpy, as a result of gravity which "pulls" the sides of the mouth down, and are therefore treated with disdain or are ignored by the young. Older workers are often placed in unventilated corners with their disregarded opinions. All these disadvantages are a recipe for unhappiness, but the reality is very different.

At this stage happiness rises sharply, a result of many factors, including:

- Financial security.
- Enhanced ability to control emotions and find solutions to conflict.
- Better at accepting misfortune.
- Less prone to anger and less inclined to pass judgment.
- A live-for-the-present attitude as a result of a limited lifespan, i.e. a determination to make the best of the remaining years.
- Acceptance of strengths and weaknesses.
- The absence of ambition and competition for position.
- Grandchildren, without the responsibility of good parenting.

As a result of these factors, stress and worry give way to general cheerfulness and happiness. This more than compensates for the physical disadvantages that accompany old age referred to above. The net result is more productive older people, just at the time when they leave the work force.

Is the average person able to buck the trend? The answer is no, but it is possible to alleviate stress and worry in middle-age by being aware of the life-cycle of happiness and its contributing factors. Stress and worry management is key, and sufficient sleep, regular exercise, adequate saving and sound money management are parts of the key.

1.9 The life-cycle and investing

As we said upfront, the above exposition is of little use if one does not have investments. Only a small percentage of people (some studies say 6–10%) reach their financial security goal (FSG), and are able to replace formal work with other activities.

Achieving your FSG at an appropriate age (i.e. whenever you wish to) is in your hands. The rules to be followed in the four phases of life are straightforward, but the majority of individual do not follow them. The reason is to be found in behavioural finance: people are innately optimistic, meaning that they subconsciously believe that will "somehow" achieve their FSG. The reality is that one has to consciously plan one's financial future. There are many hurdles (such as peer pressure and ill health) to achieving one's FSG, and these must be in one's consciousness and managed.

There is much pleasure in achievement, especially the achievement of one's FSG, and there is much unhappiness resulting from having to rely on one's children or the state for food and shelter. In general there are three assumptions to happiness in one's advanced-age period:

- Financial health.
- Physical health.
- One's children must be on the success treadmill (for this reason their education is paramount).

This section is followed by the sections:

- The financial system.
- Investment instruments.
- Investment principles.

1.10 Bibliography

Bodie, ZVI, Kane, A, Marcus, AJ, 1999. **Investments.** Boston: McGraw-Hill/Irwin.

Busetti, F, 2009. **The effective investor**. Johannesburg: Pan Macmillan.

Deaton, A, 2005 *Franco Modigliani and the life cycle theory of consumption.* Paper presented at the Convegno Internazionale Franco Modgliani, Accademia Nazionale dei Lincei, Rome, 17–18 February.

Faure, AP, 2006a. **The financial system.** Cape Town: Quoin Institute (Pty) Limited.

Faure, AP and Ackerman, MPA, 2006b. **Investment analysis.** Cape Town: Quoin Institute (Pty) Limited.

Faure, AP and Ackerman, MPA, 2006c. **Portfolio management.** Cape Town: Quoin Institute (Pty) Limited.

Fourie, L, Codrington, G and Grant-Marshall, S, 2002. **Mind over money**. Johannesburg: Penguin Books.

Fourie, L, 2004. A video interview by JPM Faure, filmed by AP Faure.

Marais, W, 2003. A video of an address by W Marais. Johannesburg: Citadel.

Oppenheimer, 2003. **Out of Africa's eden: the peopling of the world**. Cape Town: Jonathan Ball.

Personal Finance, 2010. *Buying the right risk life assurance*. Cape Town: Independent Newspapers. 20 November.

Reilly, FK and Brown, KC, 2003. **Investment analysis and portfolio analysis** 7e. Ohio: Thomson South Western.

Reilly, FK and Norton, EA, 2003. **Investments** 6e. Ohio: Thomson South Western.

The Economist, 2010. *The U-bend of life*. 18 December.