Personal Finance Test 3

LOANS

* Family members can be a source of loans
  + If you have loan money to a family member, you have to charge interest
* IRA requires you to charge
  + <3yr- .4%
  + 3-9 years 1.4%
  + >9%- 2.19%

**What defines a loan**

* **amount (par value)**
* **maturity**
* **interest**

*APR*

* includes fees
* Simple interest
  + Interest based upon principal, interest rate, maturity
  + Each period pay interest plus some principal
  + Interest declines over time, principal payment increases
  + Longer the period, the more total interest paid

*Add of Interest*

- MORE expensive

-calculate intake interest owed

- add the principal

-divide total by # of payment

* Financial institutions
  + Commercial banks
  + Savings banks
  + Credit unions
* Family members & friends
  + Must, by law, charge interest
    - See federal guidelines
  + Put terms in writing
  + Often the source of family issues

*Car Loans*

* Easy credit
  + Affects personal cash flow
  + Can be expensive
* If in trouble, selling car not a good solution
  + Car will have dropped in value
* Don’t borrow money for things that go down in value
* If *must* borrow, only borrow what can pay off in short time

*Purchasing a Car*

* Negotiating price
  + Don’t pay list
  + Don’t get caught up in ‘free’ items added
  + Visit multiple dealers (3)
    - Compare ‘like’ cars, not add-ons
    - Compare even if ‘no haggle’ dealer
  + Do research
    - May offer $200 above list
    - Dealer may get $1000 from manufacturer
    - What are other cars selling for?
* Beware buying online
  + Not like buying a book

*Purchasing VS Leasing*

* Advantages
  + Low down payment
  + Don’t need to find buyer at end
* Disadvantages
  + No equity in car
  + Need to maintain
  + Fees if drive more than N miles
  + Somebody is making money off you with financing
    - There is no free lunch
* Calculate the cost
  + PV of future cash flows (monthly lease payments)
  + Cost of purchasing a car minus PV of resale value

*Home Equity Loans*

* Loan against the equity in your home
  + Must have equity (value – mortgage)
* Typically pay interest each month
  + Principal at maturity
* Typically loan up to 80% of value (total loans)
* Home is collateral
* Interest
  + Often variable tied to index
* HILOC (home equity line of credit)
  + Borrow against equity of your home
  + Borrow up to 80%

Pay Day Loans

* Loans against your future paycheck
* **Terrible idea**
  + Bad for cash flow
  + May not have cash to meet expenses
  + HIGH INTEREST
    - May be 10% of principal
    - Equates to over 500% APR!
* Don’t borrow
  + Even credit cards are better than this

Purchasing a Home

* Down payment
  + Typically, 20% of the selling price
* Mortgage payment
  + Define the size of mortgage you can afford
  + Cash flow (including savings) to figure out what you can afford)
  + Find rates, annuity payment
  + Max size od mortgage
    - RULE OF THUMB- mortgage payment <28% of disposable income

Looking for a home

* Location
* Taxes
* Transportation
* Maintenance
* Maps
* Historical prices
* Foreclosures
* Inspection
* Negotiate

Common Mistakes

* Buy larger home than initially planned
  + More expensive homes look better
  + Just get a bigger mortgage
* Take a mortgage that is too big
  + Don’t leave cash flow for expenses
    - Owning a home is expensive (assume 1% for maintenance)
    - Appliances, repairs, mower, tools, etc.
  + Assume can make more money
    - Additional job
    - What if lose job?
* Rationalize that ok to spend more because home will increase in value
  + Home is not an investment
  + A home is where you live

*Transaction costs for a home*

* Inspection
* Down payment
  + Typically 20%
  + Cannot borrow
* Closing costs
  + Loan application fee
    - $100 - $500
  + Points
    - Percentage of loan to be paid up-front
    - Deductible
  + Loan origination fee
    - 1%
  + Appraisal fee
  + Survey (negotiable who pays)
  + Title search and insurance

Fixed Rate Mortgage

* Typically 15 or 30 years
  + 15 year mortgage has lower interest, larger payments
* Calculated as PV of annuity
* Amortization table
  + Shows amount of payments going to
    - Interest
    - Principal
    - Other
  + Over time, interest amount goes down, principal goes up

Adjustable Rates

* ARM
* Interest rate varies with market rates
  + Can go up or down
  + Typically start lower than fixed-rate
  + BUT THEN GO UP
  + May adjust monthly, annually, or other
  + May be cap on change
  + May be a limit (upper and lower)
* Interest rate index
  + May be prime rate plus
* Do you think interest rates are going up or down?

Rent vs Purchase

* Personal choice
* Financial decision
  + Renting
    - PV of rent
    - PV of insurance
  + Purchasing
    - Down payment
    - Closing costs
    - PV of
      * Taxes
      * Insurance
      * Maintenance
      * Increase in equity over period
      * Tax savings
  + Compare PVs

Other types of mortgages

* Graduated payment
  + Payments start low and increase
  + Will your disposable income increase?
* Balloon payment
  + Low payments
  + Have to pay balance in few (5) years
* Interest-only mortgage
  + No principal payment in early years
  + Big jump when (~3 years) must start paying principal
* Above look good initially
  + Big future risks

Mortgage Refinancing

* May make sense when rates decline
  + Not happening in foreseeable future
* Rate modification
  + Lender may agree to new, lower, rate to keep business
  + Will charge nominal fee
* Refinancing analysis
  + Compare PVs
    - Current mortgage PV of future payments
    - New mortgage
      * Closing costs after-tax
      * PV of higher taxes (less interest deduction)
      * Mortgage amount

Insurance

* Principles of insurance
  + Assume will not have to pay everyone
  + Assume will pay some
  + Need those who don’t use it to pay for those who do
* Thought exercise
  + You are an insurance company
  + How would you price life insurance?
    - Age?
    - Gender?
  + How would you price
    - Birth control
    - Toothpaste

What effects do required coverages have on insurance

Insurance companies

* Collect premiums
* Pay claims
* Premiums based upon probability of claim
  + Actuaries
  + Underwriters
* Rated
  + A.M. Best, Moody’s
* Agents and brokers

Auto Insurance

* Required
* Covers
  + Damages
  + Medical expenses
  + Liability
* No-fault

Liability Coverage

* Protects you when damages are caused by you
* If sued and required to pay more than your coverage, you personally pay
* Bodily injury
  + Medical bills
  + Lost wages
* Property damage
  + Car
  + Other property
* Policy limits
  + Per person per accident
  + Total injuries per accident
  + Property damage per accident
  + Shown as 50/100/55

Other types of coverage

* Medical (B)
  + Covers you and your passengers
  + May be covered by health insurance
    - But may not cover passengers
* Uninsured/Underinsured (C)
  + When not at fault
  + Covers medical costs
* Collision and Comprehensive (D)
  + Comprehensive for things like trees falling on your car
  + Covers damage to your car where you are at fault
  + Covers floods, riots, vandalism, fire, etc.
  + Limited to value of car

Deductible

* Amount of loss you are responsible for
* How much risk are you willing to take?
  + Lower deductible, higher rates
  + Higher deductible, lower rates

How much loss can you afford and at what cost in premiums

Insurance Premiums

* Based on
  + Type of car
  + Age
  + Annual mileage
  + Driving record
  + Location
  + Driver training
  + School record
* When shopping for insurance
  + Compare like coverage
  + Compare claim payment record

Auto Accidents

* Contact police
  + Always
* From other driver
  + Name, drivers license #, address, phone
  + Insurance company and policy number
  + Car license
* From witnesses
  + Names, contact info
  + Car licenses
* Take pictures
* Write down what happened
* Ask for copy of police report
* File claim with insurance company
  + They will guide you
  + May require multiple estimates
    - May have an adjuster
  + May have preferred repair shops
  + Will deal with other insurance company

Homeowner’s Insurance

* Covers
  + Damage
  + Theft
  + Liability
* Annual Premiums
  + May be included with mortgage payment
* Standard packages for coverage
  + HO-1 … HO8
  + Increasing coverage and premiums

Property Damage

* Cash value
  + Value considering wear and tear
* Replacement cost
  + Value to replace
* Other structures
  + Pool
  + Shed
  + Garage
* Coverage
  + Typically require a minimum amount to be insured
  + E.g. 80% of home value
  + Must cover at least mortgage amount

Other Home Insurance

* Personal Property
  + Need to create a home inventory
    - Take pictures or video
  + Cash value or replacement costs
  + Floater
    - Add-on to cover expensive, unusual items
  + Home office
* Liability
  + Need even if low value home
* NOTE:
  + Flood insurance is not automatically covered

Homeowner’s Insurance Premiums

* Factors
  + Value of home
  + Deductible
  + Location
    - E.g. hurricane exposure
    - Repair costs
  + Add-ons
    - Flood, earthquakes, home office
  + Discounts
    - Smoke detectors
* Controlling costs
  + Increase deductible
  + Use one insurer for all needs
  + Shop

Health Insurance

* Limits your exposure
* Providers
  + Private companies
    - E.g. Aetna, United Healthcare
  + Government
    - E.g. Medicare, Medicaid
* Insurance companies
  + Contract with health care providers
* Insurance costs have dramatically increased
  + Medical costs
    - Technology
    - Risk aversion
  + Law suits (malpractice)
  + Required coverage
  + Pre-existing conditions
  + Cover children to age 26

Private Health Insurance

* Types
  + Indemnity plans
    - Pay for service
  + Managed care plans
    - Health Maintenance Organizations (HMO)
    - Preferred Provider Organizations (PPO)
* Cover
  + Office visits
  + Hospitalization
  + Outpatient surgery
  + Emergency room
  + Other

Indemnity Plans

* Reimburse for healthcare expenses
* Free to select doctor
  + Primary care or specialist
* Costs
  + Deductible
    - You pay before insurance company pays
  + Copayment
    - Flat fee paid for service (e.g. $20)
  + Coinsurance
    - Percentage company pays for service cost (e.g. 80%)
  + Out-of-pocket maximums
    - Individual
    - Family
  + High premiums
* You typically need to file insurance claim

HMO

* Insurance company contracts with health care providers
  + Pays amount per member per month
  + Encourages providers to keep costs low (more profit)
* Typically require patient to see primary care physician first
* Must use HMO network doctors
* Costs
  + Low deductibles ($100 - $3,000)
  + Low copayments ($10 - $35)
  + No coinsurance
  + May include prescriptions
  + Out-of-pocket maximums ($6,000 - $11,500)
  + Low premiums

PPO

* You pick primary care and specialist
  + Do not need referral
  + In-network and out-of-network
* Costs
  + Deductible ($0 - $200 in-network, $100 - $2,000 out-of-network)
    - Individual / family
  + Copayment ($10 - $20)
  + Coinsurance (10% - 20%)
  + Out-of-pocket maximums ($400 - $11,500 in-network, $2,000 - $13,000 out-of-network)
  + Low but higher than HMO

Out of Pocket Expenses

* Flexible Spending Account (FSA)
  + You contribute money
  + Tax deductible
  + For expenses incurred in a specific year
  + Use it or lose it
  + Max contribution $2,550 / $5,000
* Health Saving Account (HSA)
  + You contribute money
  + Tax-deductible
  + Can carry forward unused balance
  + Can choose how to invest balance
  + Max contribution $3,400 / $6,750
* Health Reimbursement Account (HRA)
  + Funded solely by employer
  + May carry forward
  + Can choose how to invest
  + No max contribution

Medicare

* Government program
  + 65 and older (Important to sign up at age 65)
  + Disabled
* Part A
  + Hospital
  + No premiums (paid from taxes while working)
* Part B
  + Optional for out patient services
  + Premiums
* Part C
  + Combines parts A and B through private insurance
* Part D
  + Prescriptions
  + Must have A and B
  + Premiums
* Medicare
  + For low income persons
  + For elderly, blind, disabled, and needy with families
  + Administered by states
* Medigap
  + Supplemental insurance
    - Covers expenses not covered by Medicare
  + Typically choice of standard policies
    - Varies by state
    - Insurance companies decide what they will offer

Long- Term Care Insurance

* Estimate 20% of those over 50 will require long-term care
* Expensive
  + $77,000 per year on average
* Not covered by Medicare
* Long-term care insurance
  + Specifies benefits and services
  + Sets a maximum amount (per day and total)
  + Sets maximum days
  + Many options

Disability Insurance

* Definition of disability (SSA)
  + Disabled at least 5 month
  + Expected to be disabled at least 12 months or death
* Probability of disability
  + Under 40, <4%
  + Age 60, 15%
* Sources
  + Personal
  + Employer
  + Social Security
  + Worker’s Compensation

Life Insurance - term

* Life insurance over a period of time
* Typically 5 - 20 years
* Premiums
  + Periodically (monthly – annually)
  + Based on
    - Length of time
    - Age
    - Coverage amount
    - Gender
    - Smoker
    - Family medical history
* Decreasing-term insurance
* Mortgage life insurance
* Group term insurance

**Whole life insurance**

* Also known as permanent or cash-value insurance
* Pay death benefits
  + As long as premiums are paid
* Builds cash value
* Premiums
  + Constant for duration of policy
  + Portion goes to insurance, portion to savings
  + Based on similar terms to term insurance
* Compared to term insurance
  + If you want insurance, buy term insurance
  + If you want to invest, invest
  + Don’t mix the two

Universal Life Insurance

* Similar to whole life
  + Death benefits
  + Savings
* Differences from whole life
  + Can temporarily increase the level of insurance
  + Can alter payments but must cover term insurance
  + With variable life insurance you get to direct investments
* Compared to term insurance
  + If you want insurance, buy term insurance
  + If you want to invest, invest
  + Don’t mix the two

How much do you need?

* Income method
  + Specified as a multiple (e.g. 3x) of your income
  + Often offered by employers
* Budget method
  + Bottom up approach
  + Consider
    - Amount needed to cover necessities of dependents
    - Potential future large expenses (college for children)
    - Unexpected health issues
    - Unexpected job change / loss
    - Inflation
* Remember
  + Protect yourself against worst case
  + Consider your savings
  + The higher the insurance, the greater the premiums

Policies

* Beneficiary
  + One or more people
  + Divided as you prescribe
  + Overrides will, avoids probate
* Grace period
* Nonforfeiture clause
  + In whole life, can use cash value if terminate
* Loans
  + From cash value
* Renewability
* Conversion option
  + Convert term to whole life
* Settlement options
  + Lump sum or installment payments