

## **Understanding the U.S. Retirement System**

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## Does the Voluntary Employer Plan System in the U.S. Provide Adequate Resources?

Inflation-adjusted average 401(k) plan distributions as a percentage of inflation-adjusted average annual earnings, by average annual earnings, constant 2014 USD





## Retirement Plan Replacement Rates Alone Do Not Answer the Question

- » Retirement plans cannot be evaluated in isolation.
  - » U.S. retirees rely on a variety of resources.
  - » Employer-sponsored retirement plans are only one component.
  - » Social Security benefits represent the largest single source of resources.
  - » Social Security and employer-sponsored retirement plans combine to provide retirement resources.
- » Cannot understand the U.S. retirement system without understanding the U.S. Social Security system.



## Outline

» Alternative standards for retirement resource adequacy

- » U.S. safety net for the elderly
- » Employment-based retirement resources
- » If workers had adequate retirement resources, what would it look like?



## Alternative Standards for Retirement Resource Adequacy

- » Absolute standard:
  - » maintain spending above some minimum threshold
- » Relative standard:
  - » maintain pre-retirement standard of living

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#### **U.S. Safety Net for the Elderly**

- » Means-tested benefits funded with general revenue
- » Supplemental Security Income (SSI)
  - » 2014 maximum annual federal benefit
    - » \$8,652 for individuals
    - » \$12,984 for couples
- » In-kind transfers
  - » SNAP (also known as "food stamps")
  - » Housing
  - » Medicaid

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#### **Employment-Based Resources**

- » The U.S. Social Security system
- » Voluntary employer-sponsored retirement plans
  - » Defined benefit (DB) plans
  - » Defined contribution (DC) plans
- » Individual retirement accounts (IRAs)



## U.S. Social Security System Is a Mandatory Contributory Retirement Plan

- » Pay-as-you-go: dedicated payroll taxes
- » **Coverage**: 94 percent of workforce
- » Contributions: 12.4 percent of earnings
- » Benefits eligibility: equivalent of 10-years of coverage
- » Benefits: progressive benefit formula



#### Social Security Benefit Formula Is Highly Progressive

Average projected Social Security replacement rate (benefits as percentage of average inflationindexed earnings for workers in 1960s birth cohort claiming at full benefit retirement age (age 67) 101%

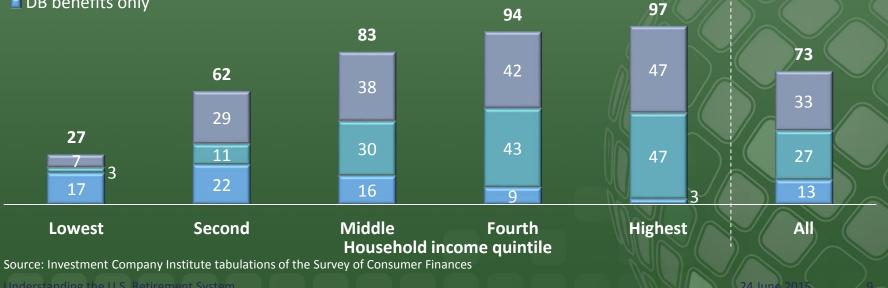




#### Most Near-Retiree Households Have Resources from the Voluntary Employer-Plan System

Households with head age 55 to 64, by quintile of household annual income, 2013

- Retirement assets (DC + IRA) only
- Both DB benefits and retirement assets
- **DB** benefits only





#### Summary So Far

- » U.S. retirees rely a combination of resources in retirement.
- » Can't judge the U.S. system without evaluating it holistically.
- » Social Security has a progressive benefit formula.
- » Three-quarters of U.S. households age 55 to 64 also have resources from employer plans.
  - » More prevalent among working households.
  - » More prevalent among higher-income households.



# If workers had adequate retirement resources, what would it look like?

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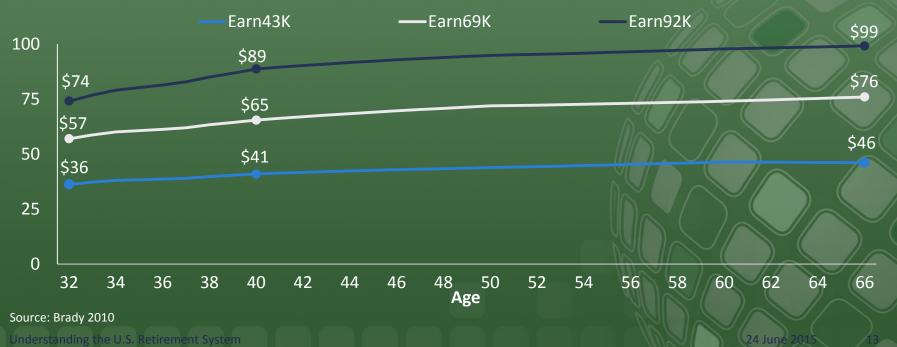
## Interaction of the U.S. Social Security and Voluntary Employer-Plan Systems

- » Illustrations based on analysis of six representative workers with a range of lifetime earnings.
  - » Only human capital: earnings while working, Social Security benefits and retirement plan distributions during retirement.
  - » Calibrate retirement plan benefits so that all achieve the same replacement rate in retirement.
    - » Target is a replacement of net income, not gross income.
    - » Rate of return on investments assumed to be 2.0 percent plus inflation.
    - » 401(k) plan assets annuitized at retirement.
- » The primary message illustrated by the simulations is that the relative importance of Social Security varies with a worker's lifetime earnings.



#### **Examples of Lifetime Earnings Paths**

Individuals born in 1966 and who retire in 2033; constant 2014 USD (thousands)





### Illustrating the U.S. Retirement System Using Six Representative Workers

Individuals born in 1966 and who retire in 2033 at age 67; constant 2014 USD; amounts rounded

	Representative workers								
	Earn21K	Earn43K	Earn69K	Earn92K	Earn122K	Earn234K			
Average inflation-indexed annual wages, age 32 to 66	\$21,500	\$43,000	\$69,300	\$91,800	\$122,400	\$234,000			
Annual wages at age 40	\$20,500	\$40,900	\$65,400	\$88,600	\$118,200	\$236,400			
Age 40 wages equal to median earnings of full-time, full-year workers age 35 to 44	0.5 x high school	High school diploma	Bachelor's degree	Graduate degree	1.33 X grad degree	2.66 X grad degree			
Wage income rank at age 40 among all workers age 35 to 44	18th	46th	73rd	85th	92nd	98th			

Sources: Investment Company Institute and Brady (2010)



#### Importance of Resources from Voluntary Employer-Plans Differs Based on Earnings

Individuals born in 1966 and who retire in 2033 at age 67; constant 2014 USD

	Representative workers								
	Earn21K	Earn43K	Earn69K	Earn92K	Earn122K	Earn234K			
Wage income rank at age 40 among all workers age 35 to 44	18th	46th	73rd	85th	92nd	98th			
401(k) plan contributions behavior									
Age at which 401(k) contributions begin	55	45	39	35	32	32			
Total contribution rate (employee plus employer)	9.0%	9.0%	9.0%	10.2%	10.8%	11.5%			
Account balance at age 66 (thousands)	\$28.3	\$112.0	\$241.3	\$422.2	\$663.6	\$1,317.9			

Source: Investment Company Institute simulations



## Does the Voluntary Employer-Plan System in the U.S. Provide Adequate Resources?

Inflation-adjusted average 401(k) plan distributions as a percentage of inflation-adjusted average gross earnings

401(k) plan gross replacement rate





## **Combination of Social Security and Employer Plans Provide Retirement Resource Adequacy**

Inflation-adjusted retirement income as a percentage of inflation-adjusted average gross and net earnings

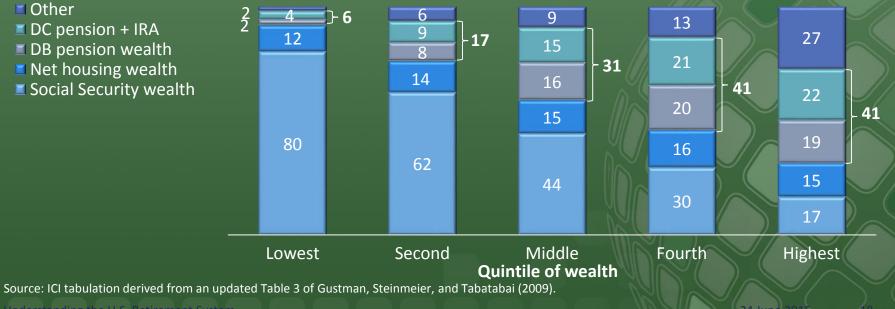
- Net retirement income as percentage of pre-retirement net earnings
- 401(k) plan gross replacement rate
- Social Security gross replacement rate





## **Composition of Actual Retirement Resources Roughly Consistent with Simulation Results**

*Percentage of wealth by wealth quintile, households with at least one member age 57 to 62, excludes top and bottom one percent, 2010* 





#### Conclusions

- Cannot understand U.S. retirement system without understanding the Social Security system.
  - » U.S. Social Security system is not the safety net for the elderly.
  - » U.S. Social Security system is a mandatory, contributory, pay-as-you-go pension system with a progressive benefit formula.
- » Rather than evidence of failure, composition of retirement resources reflect design of U.S. retirement system.
  - Social Security benefits represent a larger share of retirement resources for workers with lower lifetime earnings.
  - » Retirement resources accumulated through the voluntary employer-plan system represent a larger share for workers with higher lifetime earnings.