

Impact of income shocks on health outcomes: an income process decomposition using LISA database

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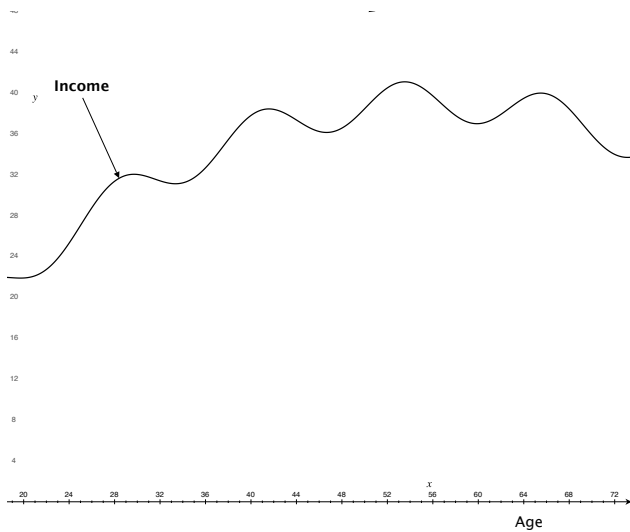
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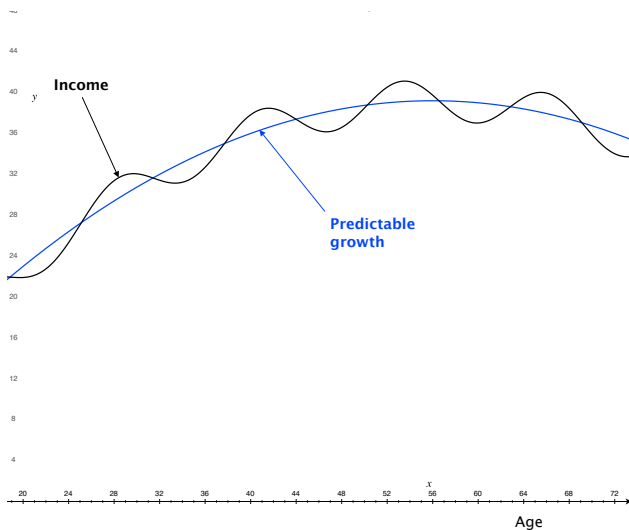


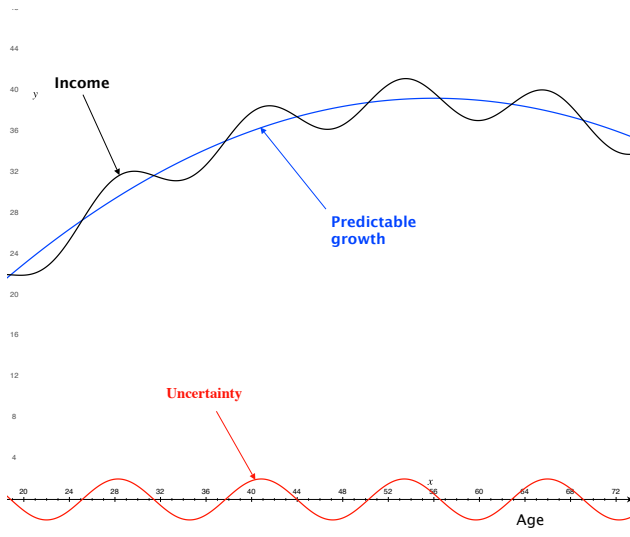
This paper

For this talk:

- ▶ Investigate the effect of income volatility on health.
- ▶ Data from the Longitudinal and International Study of Adults (LISA)
 - ▶ Physical health (2012-2014)
 - ▶ Mental health (2012-2014)
 - ▶ Family earning from administrative data (1982-2012).
- ▶ We estimate the relationship between earning shocks experienced over life cycle on health.



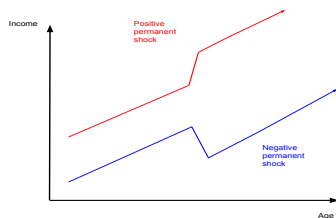




Carroll and Samwick (1997)

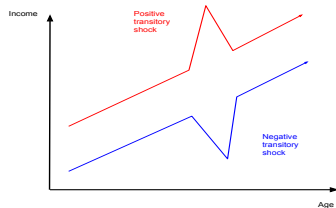
Permanent shocks:

- ▶ Promotion
- ▶ Retirement
- ▶ Loss of transfers
- ▶ Injury

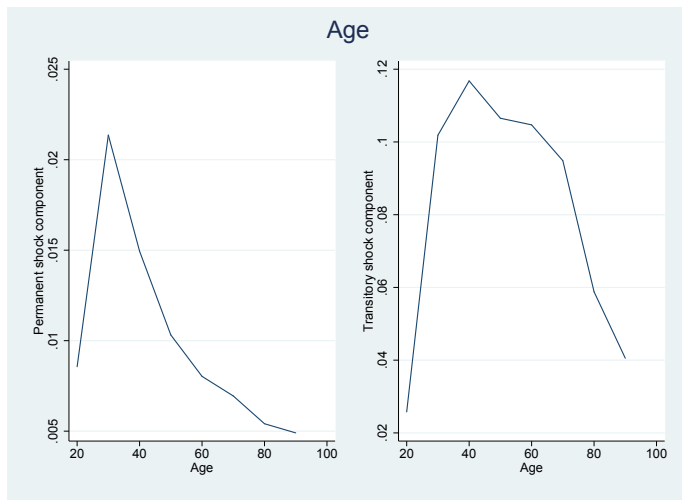


Transitory shocks:

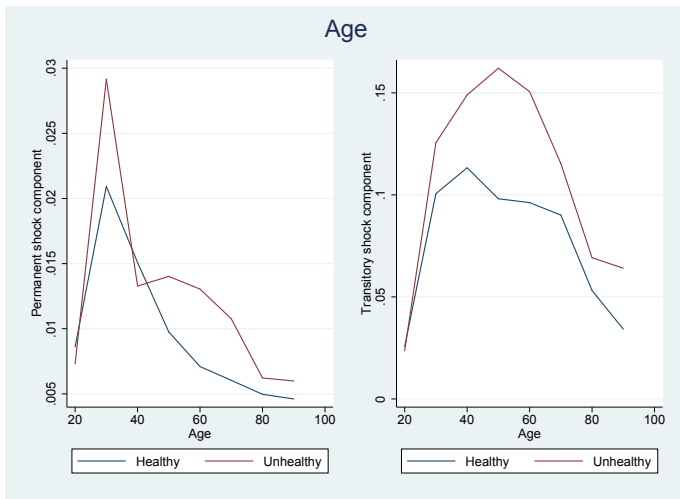
- ▶ Job loss
- ▶ Injury
- ▶ Illness



Shock Components by Age



Shock Components by Age



Physical Health

- ▶ **Self-reported health:**
 - ▶ 0 = Excellent, very good or good
 - ▶ 1 = Fair or poor

- ▶ **Activities of Daily Living (ADL):** Degree daily activities are limited
 - ▶ 0 = "Not limited at all"
 - ▶ 1 = "Limited but not severely" or "Severely limited"

Mental Health

- ▶ **Self-reported Mental health:**
 - ▶ 0 = Excellent, very good or good, 1 = Fair or poor
- ▶ **Count Mental health:** “In the last month, how often did you feel”:
 - ▶ Exhausted without any real reason?
 - ▶ Nervous? So nervous that nothing could calm you down?
 - ▶ Desperate?
 - ▶ Restless or unable to stand still?
 - ▶ So restless that you could not stand still?
 - ▶ Sad/depressed? So depressed that nothing could cheer you up?
 - ▶ Like everything was an effort?
 - ▶ Good for nothing?
- ▶ **Life satisfaction:** “What feelings do you currently have about your life in general?”
 - ▶ 0 = very unsatisfied, 10= very satisfied

		(1)	(2)	(3)	(4)	(5)
Self-Reported Health (0-1)						
Total Sample	Permanent Shocks	-0.2316*	-0.2048	0.1829	0.0613	0.0589
	Transitory Shocks	0.2033***	0.1674***	0.1133***	0.1142***	0.1141***
Age < 50	Permanent Shocks	-0.0890	-0.0700	0.0775	-0.0476	-0.0481
	Transitory Shocks	0.1097***	0.1049***	0.0764***	0.0635*	0.0636*
Age ≥ 50	Permanent Shocks	0.3117	0.2895	0.4416	0.3325	0.3250
	Transitory Shocks	0.2534***	0.1348***	0.1408***	0.1593***	0.1586***
ADL (0-1)						
Total Sample	Permanent Shocks	-0.1703	-0.1567	0.3270	0.1610	0.1601
	Transitory Shocks	0.2801***	0.2611***	0.1667***	0.2032***	0.2032***
Age < 50	Permanent Shocks	-0.0293	-0.0146	0.1442	-0.0755	-0.0452
	Transitory Shocks	0.1975***	0.1960***	0.1279***	0.1428***	0.1411***
Age ≥ 50	Permanent Shocks	0.8033	0.7409*	0.8755	0.7546	0.7288
	Transitory Shocks	0.2812***	0.2061***	0.2109***	0.2694***	0.2665***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

		(1)	(2)	(3)	(4)	(5)
Self-Reported Mental Health (0-1)						
Total Sample	Permanent Shocks	-0.0100	-0.0214	0.0683	0.0630	0.0607
	Transitory Shocks	0.0751***	0.0636***	0.0595**	0.0545**	0.0544**
Age < 50	Permanent Shocks	0.0160	0.0063	0.1024	0.0880	0.0944
	Transitory Shocks	0.0329	0.0323	0.0354	0.0313	0.0310
Age ≥ 50	Permanent Shocks	0.0250	0.0132	0.0379	0.0462	0.0310
	Transitory Shocks	0.1131***	0.0706*	0.0655*	0.0629*	0.0620*
Count Mental Health (0-10)						
Total Sample	Permanent Shocks	-0.2356	-0.3829	-0.4295	-0.5349	-0.5293
	Transitory Shocks	0.6403**	0.5852**	0.6031**	0.4907*	0.4904*
Age < 50	Permanent Shocks	-0.8560	-1.0051	-0.2186	-0.3324	-0.3270
	Transitory Shocks	0.1571	0.1698	0.3601	0.2148	0.2145
Age ≥ 50	Permanent Shocks	-0.4750	-0.5678	-0.6953	-0.9247	-0.9127
	Transitory Shocks	1.3758***	1.2271***	0.8663**	0.8142**	0.8140**
Life Satisfaction (1-10)						
Total Sample	Permanent Shocks	-1.9187*	-1.7957	-1.9137*	-1.8001	-1.8580
	Transitory Shocks	-0.7461***	-0.6986***	-0.5514**	-0.4974**	-0.4949**
Age < 50	Permanent Shocks	-0.4865	-0.3536	-0.8897	-0.7610	-0.8041
	Transitory Shocks	-0.1978	-0.2096	-0.2574	-0.1677	-0.1655
Age ≥ 50	Permanent Shocks	-6.0257**	-5.9680**	-5.1958**	-5.0746**	-5.1802**
	Transitory Shocks	-1.2941***	-1.1662***	-0.7788**	-0.7742**	-0.7727**

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Conclusion

- ▶ **Futur work:**
 - ▶ Estimate permanent and transitory shocks after simulating the application of different policies that can reduce earning volatility:
 - ▶ Increase of employment insurance.
 - ▶ Different level of guaranteed minimum income.
 - ▶ Estimate the health improvement following these policies.