Fake Paper to Document Some Useful Tricks in LaTeX*

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December 10, 2024

Abstract

This is just some fake content (gibberish) to demonstrate tricks for revising a paper in response to referee and editor comments. The

*We thank our brilliant editor and two insightful, anonymous referees.

1 Introduction

In this paper we make three make contributions. First, we extend the sample period used in the seminal work of Piketty and Saez (2003). Second, we apply re-weighting methods as in DiNardo, Fortin, and Lemieux (1996). Third, we develop an instrumental-variable strategy based on plausibly exogenous variation in differences between the lunar and Gregorian calendars.

2 Model

A complete model is presented in Appendix B. Here, we sketch the basic intuition.

Assume a four-period model with two boundedly rational agents and a social planner with Rawlsian preferences and a discount rate of zero. Our model borrows liberally from Mirrlees (1971) and Rowling (2015).

3 Empirical strategy

The underlying logic of empirical strategy is that holidays provide workers free time away from the labor market, allowing them time to organize. In some years, the lunar and Gregorian calendars correspond to provide a greater number of holidays, providing quasi-random variation in the number of holidays and thus time for working to organize into unions. We thus hypothesize that there is a strong, positive relationship between union density and the number of holidays in a give year t.

Our empirical strategy is clearly illustrated in Figure 1.

4 Results

Table 1 depicts the main results. The first stage shows a strong relationship between years where there are a confluence of lunar- and Gregorian-calendar holidays and greater union density. Contrary to our hypothesis in Section 3, the coefficient on the *Holidays* variable is negative, so we now hypothesize that a greater number of holidays reduces the ability of workers to organize into unions (due, naturally, to greater distraction).

The second-stage results support the main hypothesis that union density reduces inequality. Greater union density increase the labor-share of income and reduces the top-ten-share of income.

5 Robustness

A natural question is which holidays to include in the instrumental variable. In Appendix Table A.1 we add to the regression in Table 1 a control for minor holidays, including those from the Chinese calendar.[1] Remarkably, the results are unchanged.

6 Conclusions

Our work raises many questions that we believe will be fruitful ground for future research.

References

DiNardo, J., N. M. Fortin, and T. Lemieux (1996). "Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach". In: *Econometrica* 64.5, pp. 1001–1044.

Mirrlees, J. A. (1971). "An exploration in the theory of optimum income taxation". In: *The review of economic studies* 38.2, pp. 175–208.

Piketty, T. and E. Saez (2003). "Income inequality in the United States, 1913–1998". In: *The Quarterly journal of economics* 118.1, pp. 1–41.

Rowling, J. K. (2015). *Harry Potter and the philosopher's stone*. Vol. 1. Bloomsbury Publishing.

[1] The minor holidays we add include Arbor Day, Flag Day, and Groundhogs Day.

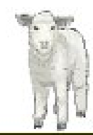
Table 1: Aggregate inequality as a function of union density

	Union density		Labor share		Top 10		Labor share	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lunar & Gregorian holidays	-0.289**	-1.154**	0.221**	0.563**	-0.621**	-0.555**	0.325**	0.230**
	[0.122]	[0.397]	[0.0774]	[0.244]	[0.118]	[0.136]	[0.0613]	[0.0505]
Change in skill share	28.83	-10.06	-9.580	1.670	-5.516**	-5.174**	1.450	1.143
	[26.18]	[6.214]	[11.81]	[3.167]	[1.844]	[1.804]	[1.057]	[0.878]
Change in manuf. share	11.71	19.60	19.44	-6.201	0.891	-2.062	6.405	9.923
	[31.31]	[65.65]	[15.43]	[37.14]	[13.09]	[12.12]	[7.331]	[6.220]
Dept. var. mean	0.292	-5.554	4.107	0.920	0.643	0.643	0.0320	0.0206
First-stage F-stat	12.68	8.237	12.68	8.237	16.22	24.30	16.22	24.30
Top CI	-.593175	.	-.064511	.244108	-.943238	-.936806	.177024	.072219
Bottom CI	.005594	-.604125	.346269	.	-.402154	-.366746	.385776	.27621
Interval	1929-38	1938-47	1929-38	1938-47	All	All	All	All
Ex. Mich	No	No	No	No	No	Yes	No	Yes
Observations	47	47	47	47	409	400	409	400

Sources: XXX.

Notes: XXX.

Figure 1: Illustration of first-stage variation



Gregorian-Lunar Calendar Conversion Table of 2015 (Yi-wei year of the Goat)

Gregorian date		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Solar Terms
Jan	Lunar date	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	12th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	Moderate Cold : 6 Severe Cold : 20
Feb	Lunar date	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1st Lunar Month	2	3	4	5	6	7	8	9	10				Spring Commences : 4 Spring Showers : 19
Mar	Lunar date	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	2nd Lunar Month	2	3	4	5	6	7	8	9	10	11	12	Insects Waken : 6 Vernal Equinox : 21
Apr	Lunar date	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	3rd Lunar Month	2	3	4	5	6	7	8	9	10	11	12		Bright & Clear : 5 Corn Rain : 20
May	Lunar date	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	4th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	Summer Commences : 6 Corn Forms : 21
Jun	Lunar date	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	5th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15		Corn on Ear : 6 Summer Solstice : 22
Jul	Lunar date	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	6th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Moderate Heat : 7 Great Heat : 23
Aug	Lunar date	17	18	19	20	21	22	23	24	25	26	27	28	29	7th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Autumn Commences : 8 End of Heat : 23
Sep	Lunar date	19	20	21	22	23	24	25	26	27	28	29	30	8th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		White Dew : 8 Autumnal Equinox : 23
Oct	Lunar date	19	20	21	22	23	24	25	26	27	28	29	30	9th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Cold Dew : 8 Frost : 24
Nov	Lunar date	20	21	22	23	24	25	26	27	28	29	30	10th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		Winter Commences : 8 Light Snow : 22
Dec	Lunar date	20	21	22	23	24	25	26	27	28	29	11th Lunar Month	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Heavy Snow : 7 Winter Solstice : 22

Remarks: 1. Represent the first day of the Lunar month 2. Sundays are in red

Data sources: XXXX.

Notes: XXX.

Appendix A. Supplementary results noted in the text

Appendix Table A.1: Main results, robustness to including minor holidays

	Union density		Labor share		Top 10		Labor share	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Lunar & Gregorian holidays	-0.289**	-1.154**	0.221**	0.563**	-0.621**	-0.555**	0.325**	0.230**
	[0.122]	[0.397]	[0.0774]	[0.244]	[0.118]	[0.136]	[0.0613]	[0.0505]
Minor holidays (incl.	28.83	-10.06	-9.580	1.670	-5.516**	-5.174**	1.450	1.143
Chinese)	[26.18]	[6.214]	[11.81]	[3.167]	[1.844]	[1.804]	[1.057]	[0.878]
Dept. var. mean	0.292	-5.554	4.107	0.920	0.643	0.643	0.0320	0.0206
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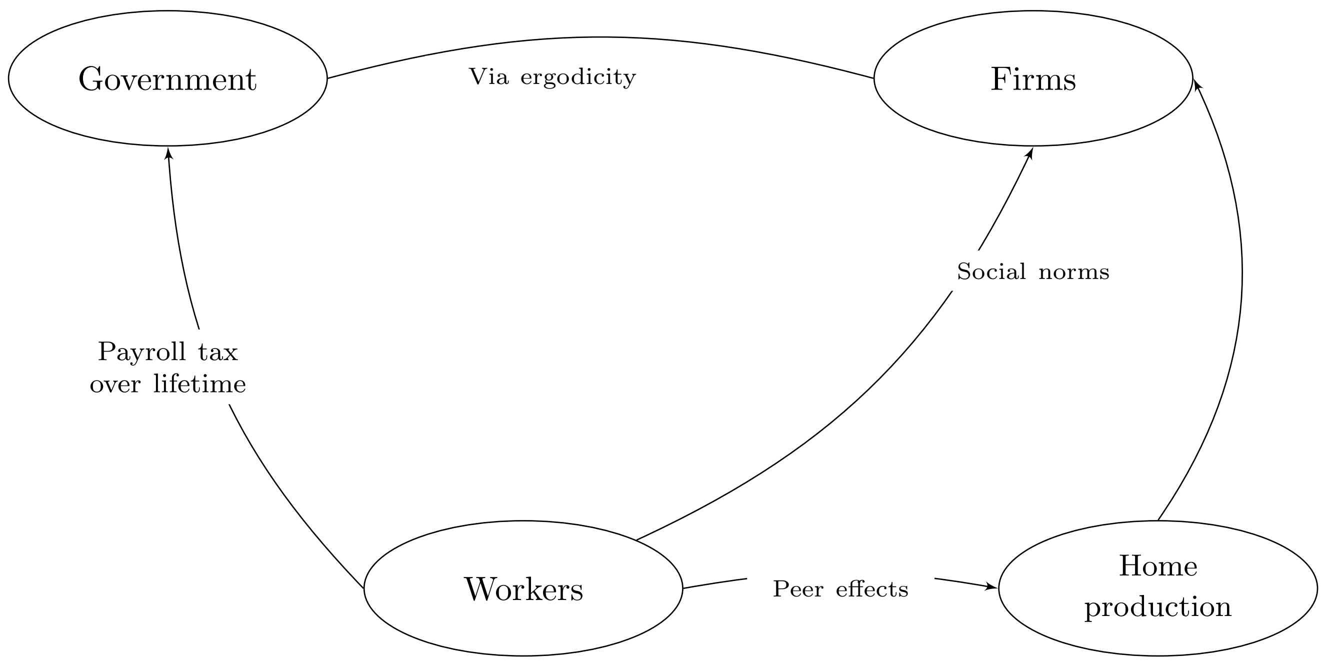
Interval	1929-38	1938-47	1929-38	1938-47	All	All	All	All
Ex. Mich	No	No	No	No	No	Yes	No	Yes
Observations	47	47	47	47	409	400	409	400

Notes: The specifications are identical to those in Table 1 except that here we add controls for minor holidays.

Appendix B. Formalization of the model

Our model is clearly illustrated in Appendix Figure B.1.

Appendix Figure B.1: Illustration of the theory



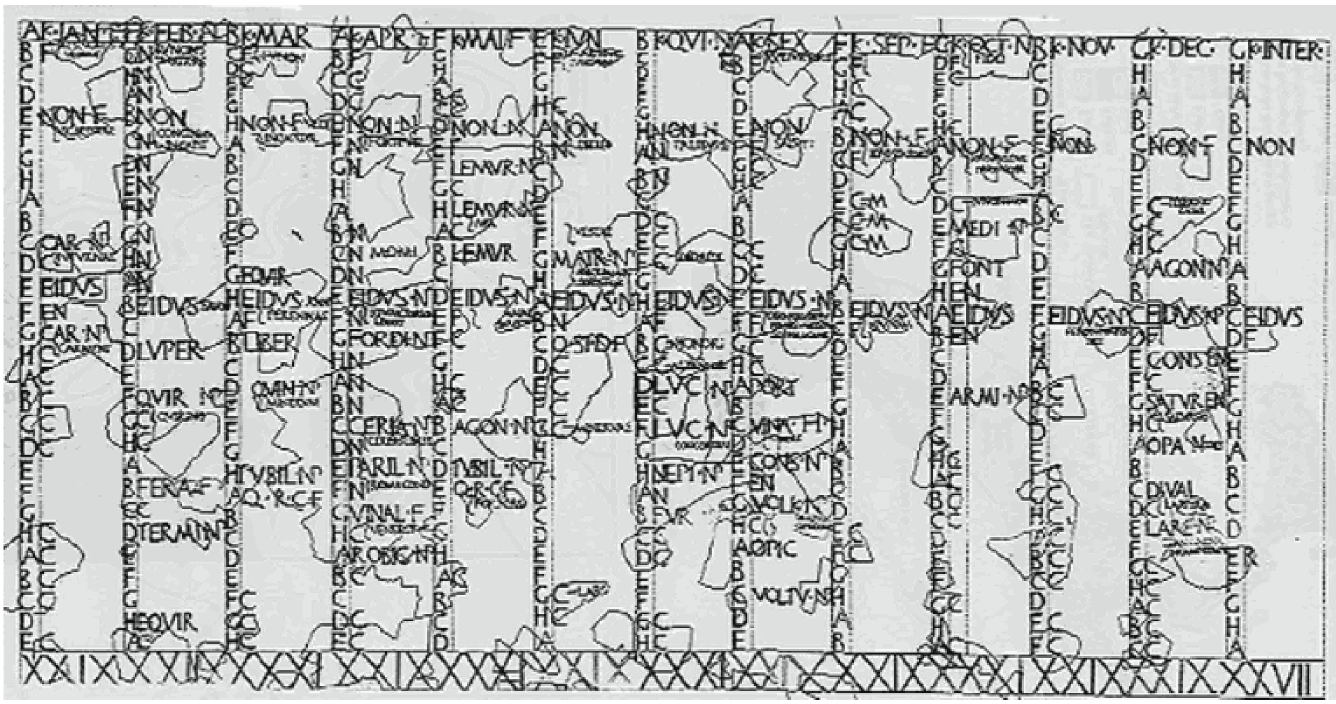
Notes: XXX.

Appendix C. History of the lunar and Gregorian calendars

We digitize calendars from the Ancient, Julian and Gregorian periods. See Appendix Figure C.1 for an example of the material we digitize.

For further background, please see Depuydt (1997) and McKay (2016).

Appendix Figure C.1: Example of ancient calendar



Notes: XXX.