

The US Net Social Wage in Four Lines

Shaikh & Tonak (1994), Shaikh & Tonak (2000), Tonak's 2025 update, and Moos (2019): what each author actually published, where the baskets diverge, and which assumptions decide the sign

RED — Real Econ Data

Built 2026-08-11 from the comparative net-social-wage lane • all sources read-only

Vintage caveat — read this before any chart. The arm labelled "*Shaikh-Tonak*" inside E. A. Tonak's 2025 comparison workbook is the **Shaikh & Tonak (2000), ch. 29, Table 29.1** vintage — **not** the 1994 book's Appendix N. All seven of its Group-II component lines reproduce Table 29.1 exactly at 1964 and *none* matches Table N.1. The workbook therefore contains *no* arm that reproduces the printed 1994 line; that line is a fourth series, held only in the Shaikh–Tonak module as **S607-A**. Never label the workbook arm "Shaikh & Tonak 1994." This caveat is repeated on the README, on the COMPARISON sheet header and on every per-line sheet of the companion workbook **NSW_COMPARISON.xlsx**.

What this document is

RED holds four independent measurements of the same object — the US net social wage, $NSW = (E_1 + LS \cdot E_2) - (T_1 + LS \cdot T_2)$ — built by three sets of authors across thirty-one years of scholarship. This report states, for each line, what its author actually published or supplied; sets the four baskets against each other component by component with a source locus on every row; isolates the assumptions that decide the *sign* of the result rather than its level; separates what RED verified from what it did not; and lays out the evidentiary basis a joint Tonak–Anderson commentary on Moos (2019) could stand on.

The four lines are never merged, spliced or averaged. Every number below is either a single value from exactly one line or an explicitly named $A - B$ difference. The umbrella index is **nsw_comparative_registry.json** (117 series: 100 from the Shaikh–Tonak/Tonak lane, 17 from the Moos lane); the aligned data are in **NSW_COMPARISON.xlsx** (885 value cells, none of them a blend).

Where the four lines meet. All four carry observations only over 1959–1989 (31 years). Outside that window a column is blank; nothing is extended, interpolated or back-filled from a neighbouring line.

Year	the four lines, \$bn			reference only		Moos-method-as-Tonak
	Book-1994	ST-2000 arm	Tonak-2025	Moos-2019 NSW1	Moos NSW2	
1964	-8.1000	-3.7009	-5.8724	-6.7927	-47.6531	-0.5308
1989	-123.1600	-62.8490	-55.1662	-7.4772	-278.9213	33.9062
<i>as % of GDP, RED-computed on ONE stated denominator (the GDP row in Tonak's workbook: 685.8 at 1964, 5,657.7 at 1989)</i>						
1964	-1.181 %	-0.540 %	-0.856 %	-0.990 %	—	—
1989	-2.177 %	-1.111 %	-0.975 %	-0.132 %	—	—

Read the top block first and the ratios second. In 1964 the four estimates of the same year span -8.1 to -3.70 — a factor of 2.2 — and by 1989 they span -123.16 to -7.48 , a factor of 16. *None of that spread is measurement error.* Every dollar of it is traceable to a stated choice about which flows belong in the basket, which weight they carry, and which NIPA vintage supplies them. The rest of this document traces it.

1 What each author actually published or provided

Line 1 — Shaikh & Tonak (1994), *Measuring the Wealth of Nations*, Appendix N

What exists in print. Table N.1 (p. 358) prints an eighteen-line benefit-and-tax grid for **1964 only**. Table N.2 (p. 359) prints three annual rate rows — benefit rate, tax rate, net rate — as fractions of *employee compensation*, 1952–1989. There is no annual category panel and no NSW/GDP ratio anywhere in the appendix.

What RED holds. the Shaikh–Tonak module, rebuilt 2026-08-11: **S607-A** (the net transfer row, 1952–1989, anchored on the *printed* -8.1 at 1964), **S605-B1-A** (total benefits, printed 68.0), **S604-A** (total taxes, printed 76.2), the 1964-only component arms **S601-A/S602-A/S603-A/S605-A/S606-A**, the EC denominator **S617-A** (Table H.1, 370.99 at 1964), and the three printed N.2 rate rows as **XS1102-A/XS1103-A/S608-A**. All eighteen printed N.1 lines reproduce exactly, and recomputing each printed Group-II labour cell as printed total $\times 0.727$ independently reproduces 10 of 11 — the exception being Transportation, which N.1's own footnote additionally scales by the gas share of passenger cars (implied $6.7/(13.1 \times 0.727) = 0.7035$).

The book's tax-side boundary, in the book's own words:

Footnotes: a small "net government lottery receipts" category is treated as a positive net tax (Tonak 1987); corporate profit taxes, indirect business taxes, and estate/gift taxes are excluded (not levied on workers).

QUOTE LEDGER Q-C1a-06 • shaikh_tonak1994 • line 1930 (Appendix N digest, book pp.356-357); this is the KB DIGEST of the appendix prose, not a page-verbatim transcription - promote only after checking against a page image of p.357

Three book-internal inconsistencies are disclosed, not smoothed.

- **DIV-080.** N.1 prints a net of -8.1 ; its own components give $68.0 - 76.2 = -8.2$. The components are reproduced exactly, the computed net is reported, and the *printed* net is kept as the anchor.
- **DIV-081.** N.2's printed benefit rate of 0.19 at 1964 implies $B_1 = 70.4881$, whereas N.1 prints 68.0 ($68.0/370.99 = 0.18329 \rightarrow 0.18$). N.1 and N.2 cannot both be hit at 1964; dollars anchor on N.1, rates on N.2.
- **DIV-082 (found by the 2026-08-11 rebuild).** The ten printed benefit *labour* cells sum to **68.6**, not the printed $B_1 = 68.0$. Ten one-decimal cells can drift at most $10 \times 0.05 = 0.50$, so 0.60 is *not reachable by rounding*; the printed tax column, by contrast, sums exactly. Two single-cell hypotheses would each close it exactly (dropping the Postal 0.6 line, or Transportation labour being 6.1 rather than 6.7). **Neither is adopted.** Closing DIV-082 requires a second independent capture of p. 358 — an acquisition item, and one that Tonak's update cannot adjudicate, because his comparison arm is the 2000 vintage.

Line 2 — Shaikh & Tonak (2000), ch. 29, as carried in Tonak's 2025 workbook

This is the headline provenance finding of the whole study, and it changes how every prior chart in this literature should be labelled. The arm the workbook calls "Shaikh-Tonak" reproduces *Shaikh & Tonak (2000)* Table 29.1, not the 1994 book. At 1964:

quantity	Tonak-2025 workbook, ST arm	ST 2000 Table 29.1	1994 book App. N	Δ vs ST 2000	Δ vs b
B_1 total benefits	69.9528	70.15	68.0	-0.197	+1
T_1 total taxes	73.6537	73.65	76.2	+0.004	-2
net social wage	-3.7009	-3.49	-8.1	-0.211	+4
E_1 Group I benefits	33.884	34.08	33.4	-0.196	+0
$E_2 \times LS$	36.0688	36.07	35.2	-0.001	+0
T_1 Group I social insurance	30.075	30.08	30.1	-0.005	-0

Four of six aggregates match ST 2000 to ≤ 0.005 ; none matches the book. All seven Group-II component lines in the workbook's own comparison block (rows 101–113) reproduce Table 29.1 exactly — Education 28.2, Health 5.1, Recreation 1.2, Energy 1.4, Natural Resources 2.1, Postal 1.1, Transportation 15.6, implying $E_2 = 50.02$, precisely ST 2000's printed figure — and none matches N.1 (27.6, 6.4, 1.2, 1.0, 2.0, 0.8, 13.1). Tonak states the reason himself in the document transmitted with the workbook:

Since Table N1 (initially published in the 1987 essay) was not clear and contained some errors, when the book's data replicated and updated the referenced table, it must be the one in the 2000 essay (Table 29.1).

QUOTE LEDGER Q-C1a-01 • tonak2025update • paragraph 13 of 20 (0-indexed 12); docx core property dcterms:created 2025-10-02T13:49:00Z, author "E. Ahmet Tonak"

The same document corrects a citation error that has propagated for two decades, and closes a bibliographic loose end in Appendix N itself:

** This publication date was mistakenly given as 2002 on the current Shaikh's website.*

QUOTE LEDGER Q-C1a-02 • tonak2025update • paragraph 18 of 20 (0-indexed 17); footnote to the reference list

1987 work was published (attached), but the so-called ‘forthcoming’ work was not materialized. However, Shaikh and Tonak published another piece on NSW, which is the following (also attached):

QUOTE LEDGER Q-C1a-03 • tonak2025update • paragraph 9 of 20 (0-indexed 8); bears on Appendix N’s own citation “Forthcoming. ‘The Social Wage in the United States’”

Line 3 — E. A. Tonak’s 2025 update

What was supplied. [2025.10.02] MY UPDATE COMPARISON NSW.xlsx, twelve sheets, zero merged cell ranges, transmitted with two Word documents. RED digitized it with `openpyxl(data_only=True)` — **stored values only; no formula was evaluated by hand anywhere** — yielding 99 series and 5,160 cells, with 13 cells excluded and individually enumerated rather than guessed. Every aggregation identity of the update closes to machine epsilon: E_1 from its three branches, E_2 from its seven lines, $LS \cdot E_2$, T_2 from its six lines, total benefits, total taxes, and $NSW = \text{benefits} - \text{taxes}$, all with maximum deviation 0.

Two author questions are open in the source itself and are carried verbatim rather than resolved:

Postal Service (moved to??) ==> I emailed Pam about this!

QUOTE LEDGER Q-C1a-04 • tonak2025update • sheet ‘Expend&Taxes’, cell B51 (section header above the Postal-service rows; the Postal-service expenditure row r52 is 0 or negative in every year)

Contributions for government social insurance (HOW ADJUSTED?)

QUOTE LEDGER Q-C1a-05 • tonak2025update • sheet ‘Expend&Taxes’, cell B67; cell A67 reads ‘Our adjusted new data’. Row 67 is byte-identical to row 66 (T1) across 1959-2016

The two figures RED cannot read. NSWComparisons-EAT_NA.docx (author *E. Ahmet Tonak*, created 2025-10-01, revision 1) contains **no text at all**: its single paragraph is empty and its entire content is **two embedded PNG images** (word/media/image1.png, image2.png). These are chart images. **They were not digitized**, because reading values off a raster is precisely the guessing this study forbids. They are the only un-digitized author content in the transmitted tree and are recorded as an acquisition item: if their series are wanted, the underlying numbers must be requested.

One named dependency is missing. Cell B68 of Expend&Taxes reads *See “social security diff new vs old data.xlsx”*. That file is not in the harvest, so the difference between Old Shaikh/Tonak T1 (1959–1997) and the update’s T_1 cannot be explained from what RED holds.

Two files with authoritative-sounding names are not Tonak’s. NSW_canonical_1952_2025.csv embeds `np.float64(...)` representations in its component columns — it is a machine reconstruction, and its 1959 values match neither the workbook nor the book. NSW_authentic_only.csv is a 54-row extract of the workbook’s own NSW (MOOS) row carrying an unrelated methodology block. Neither was digitized; the filenames “canonical” and “authentic” should be treated with suspicion.

Line 4 — Katherine A. Moos (2019), *RRPE* 51(4):581–605

What exists in print. Six tables (243 numeric cells), digitized on a `paper_printed` arm that is the *primary anchor set*. Moos prints *no annual NSW table anywhere* — only Figures 1/2/7 and summary statistics — so the annual level series exists on the workbook arm alone.

What was supplied. [2025.10.02] Moos DATA.xlsx, her own working file, received via E. A. Tonak: a full 1959–2012 panel (2,142 cells) plus a GCONS Appendix and a 2010 column carrying NIPA table/line loci for every variable. The two arms overlap on 95 cells: **89 agree at printed precision, 6 agree only under truncation toward zero, 0 are discrepant**. Table 4’s growth accounting reproduces **79/79 exactly** from the workbook.

The vintage trap, and the anchor failure it caused. The 2017 working paper prints materially different numbers from the 2019 article for the same statistics. Moos’s own 2017 text:

Shaikh and Tonak’s series shows a minimum of -2.1% of GDP, median of -0.2%, mean of 0.0%, and maximum of 2.9%. My replicated series shows minimum of -1.2%, median of 1.0%, mean of 1.1%, and maximum of 3.7%. The mean difference is approximately 1.1 percentage points of GDP, which I attribute to NIPA revisions rather than methodological differences.

QUOTE LEDGER QM00S-001 • moos2017wp • Section 3 'Extended Net Social Wage Data Series', WP pp. 4-5; KB full_transcription.md line 124; re-read from source 2026-08-11

The workbook matches the **2019** cell in every case and the 2017 cell in *none* (NSW/GDP 1959–97 mean 0.004 vs 0.011; nominal NSW range −28.99 to 1198 vs −13.18 to 1288; NSW/EC max 0.150 vs 0.161; 1983/2010 NSW/GDP 1.7%/8.0% vs 2.1%/8.6%). The predecessor project's XS1301 stored the 2017 mean (0.011) as its anchor while its reconstruction achieved 0.0042 — which is the *published* value. The recorded $\approx 62\%$ "anchor failure" is therefore an **anchor-vintage error, not a reconstruction defect**. The true published Moos (2019) Table 1 values for the 1959–97 overlap are Min −0.020, Median 0.005, Mean **0.004**, Max 0.032.

Moos's denominator differs from ST's, by her own statement:

[6] Shaikh and Tonak (2000) considers the net social wage/ employee compensation. This paper mainly uses the NSW/GDP ratio, which is constructed using the same methodology and can be found in Shaikh (2003).

QUOTE LEDGER QM00S-003 • moos2017wp • Section 3 footnote 6, WP p. 5; KB full_transcription.md line 134; re-read from source 2026-08-11

A fifth series that must not be mistaken for a fourth line

Tonak's workbook contains a row labelled NSW (MOOS). **It is not Moos's series.** Against Moos's own workbook NSW1 it deviates by up to 127.071 bn (2007), never coinciding in any of the 54 overlapping years; at 1964 it reads -0.5308 where Moos's own file reads -6.7927. The component evidence is unambiguous: Tonak's E_1 on that arm is 27.7 at 1964 where Moos's own E_1 is 32.3 (and $E_{1a} - E_{1b}$ is 28.4). It is Tonak's *re-implementation of what he takes Moos's method to be*, on his own NIPA vintage. Under RED's honest-attribution rule (DIV-049) it is charted as "Moos method as implemented by Tonak (2025)" and never as "Moos (2019)." The same rule bites on RED's own holdings: MWN's Moos_nsw_reconciled.csv is byte-equal to Moos's workbook, so XS1301/XS1302 are *transcriptions of her file*, not independent corroboration of it.

2 The component-by-component divergence table

Every row below carries its source locus. Book values are the printed Table N.1 (1964) cells; Tonak values are stored workbook cells at 1964; Moos values are her workbook's 2010 appendix column — the one year she prints with NIPA table/line loci attached. **The three baskets are never added together.** The full 32-row version, with the verbatim row labels including their leading whitespace and their typos, is the COMPONENT_MAP sheet of NSW_COMPARISON.xlsx.

Tonak-2025 tim label (locus)	verba-	1964	Book gory (locus)	App.-N cate-	1964	Moos category (NIPA locus)	2010
BENEFIT SIDE — Group I (allocated entirely to labour, weight 1.00)							
E1 (Revised NIPA-reclassified) Expend&Taxes!r12		36.3	Group I total, lines 1+2+3 Table N.1 p.358; S605-A		33.4	$E_1 = E_{1a} - E_{1b} + E_{1c}$ workbook r7	2329.1
Income Security Expend&Taxes!r14		31.9	Income support, social security, welfare N.1 line 1		29.9	E_{1a} NIPA 3.12 l.2 + 3.15.5 l.35	2330.2
Income security-Gross Investment r16; cell A16 = 3.17.114		0.2	not in the book basket — BEA (1981) social-welfare tables carry no investment line		—	not in Moos's basket	—
Medicare r17; A17 = 3.12.6		n/a	Health and hospitals — Group II in the book N.1 line 5		6.4	inside E_{1a} , at full value NIPA 3.12 l.2	—
Medicaid r19; A19 = 3.12.33		n/a	Health and hospitals — Group II N.1 line 5		6.4	inside E_{1a}	—
Housing and community services r21		4.2	Housing and community services N.1 line 2		2.8	E_{1c} NIPA 3.15.5 l.26	63.8
Labor Training and Services r24		0.2	Labor training and services N.1 line 3		0.7	folded into E_{1a} NIPA 3.12 l.41	—

Tonak-2025 tim label (locus)	verba-	1964	Book category (locus)	App.-N cate-	1964	Moos category (NIPA locus)	2010
BENEFIT SIDE — Group II (scaled by the labour share)							
E2 r35		42.59	Group II total before the share N.1 lines 4–10		48.216	$E_2 = \sum E_{2.1..2.6} + E_{2.7}$ workbook r15	1305.54
Education (Excluding Labor Training and Services) r36		27.7	Education N.1 line 4 (labour 20.1)		27.6	$E_{2.1}$ NIPA 3.15.5 l.29	830.9
Health (Excluding Medicare & Medicaid) r39		7.4	Health and hospitals N.1 line 5 (labour 4.7)		6.4	$E_{2.2}$ NIPA 3.15.5 l.27	218.4
Recreation and culture r42		1.3	Recreational and cultural activities N.1 line 6		1.2	$E_{2.3}$ NIPA 3.15.5 l.28	42.9
Energy-Expenditures r46; A46 = 23		0.3	Energy N.1 line 7		1.0	$E_{2.4}$ NIPA 3.15.5 l.22	46.7
Natural resources-Expenditures r49; A49 = 24		0.5	Natural resources N.1 line 8		2.0	$E_{2.5}$ NIPA 3.15.5 l.23	50.8
Postal service-Expenditures r52; A52 = 25		0.0	Postal service N.1 line 9		0.8	$E_{2.6}$ NIPA 3.15.5 l.24	3.0
Transportation-Passenger r54 = r55×r56		5.39	Transportation N.1 line 10, × gas share 0.7035		13.1	$E_{2.7} \times \text{GCONS}$ NIPA 3.15.5 l.13	113.86
(no row exists)		—	Veterans benefits — EXCLUDED, Group III faux frais		0.0	E_{1b} , subtracted as a cost of war NIPA 3.12 l.14,16,17,42	64.9
TAX SIDE							
Tax Group I Labor Total: Paid Entirely by Labor=T1 r66		29.9	Contributions for social insurance N.1 line 12		30.1	$T_1 = T_{1a} - T_{1b} - T_{1c}$ NIPA 3.6 l.1 less l.14/16/30 less l.26	934.6
Federal Income Taxes r71; A71 = T.3.4.2		46.0	Personal income taxes fed.+state N.1 line 13 (labour 36.4)		50.0	$T_{2.1}$ NIPA 3.4 l.2	893.8
State and Local Income taxes r72; A72 = 9		4.0	(same book line)		—	$T_{2.2}$ NIPA 3.4 l.9	267.1
Motor vehicle licenses r73; A73 = 10		1.1	Motor vehicle taxes and licenses N.1 line 15		1.1	$T_{2.4}$ NIPA 3.4 l.10	16.3
Property taxes r74; A74 = 11		0.7	Personal property taxes, homeowner part only × share (Tonak 1984 ch. IV) N.1 line 16		8.4	$T_{2.5.1}$ NIPA 3.4 l.11	7.5
Taxes on Owner Occupied Housing r76; A76 = T.7.12.158		7.7	(same book line — the hand-made split is now an explicit NIPA line in both later lines)		—	$T_{2.5.2}$ NIPA 3.5 l.38	438.6
Other taxes r75; A75 = 12		0.3	Other taxes and non-taxes N.1 line 14		3.8	$T_{2.3} = \text{other taxes} + \text{lotteries}$ NIPA 3.4 l.12 + 3.3 l.22	−11.1
(no row exists anywhere)		0.0	Sales / excise — EXCLUDED ("not levied on workers") prose pp.356–357		0.0	T_3 , a separate measure used only for NSW2 NIPA 1.10 l.7	1063.1
THE SHARE AND THE DENOMINATOR							
New Labor Share r32; cell A32 = Recalculated		0.71310	labour share, 1964 only N.1 footnote		0.727	$LS = L_{s2}/L_{s1}$ NIPA 2.1 l.2 / l.1	0.64071
Employee Compensation (EC) r117		376.8	EC, Table H.1 S617-A		370.99	L_{s2} NIPA 2.1 l.2	7967.3

Two labelled constructions that are not what their label says

Both were recovered by identity search, are reported to machine precision, and were **not corrected**.

- **Education (Excluding Labor Training and Services)** (r36) announces only that the labour-training *education* line is excluded, but it nets out the **whole** Group-I Labor Training and Services aggregate — including **Employment and training** (up to 1.9bn from 1974), a line that was never inside Group-II Education. The recovered identity $r37 + r38 - r24$ holds to 2.8×10^{-14} in 58/58 years.
- **Health (Excluding Medicare & Medicaid)** (r39) announces two exclusions but subtracts **Medical care**, which is Medicaid *plus* Other medical care (5–14bn in later years); other-medical is therefore removed silently as well. The recovered identity $r40 + r41 - r18 - r17$ holds to 1.1×10^{-13} in 58/58 years.

The three headline divergences, quantified

(1) **The medical reweighting — the single largest basket redefinition.** Medicare, Medicaid and Other medical care move *into* Group I (labour share 1.00) and are removed from Group-II Health (labour share ≈ 0.63 by 2016). At 1964 this is worth **nothing** — Medicare and Medicaid begin in 1966. By 2016 Medicare alone is 655.9bn and Medicaid 563.0bn, 1,218.9bn together, with Other medical care adding 11.5bn: roughly **1.2 trillion of benefit flow reweighted from ≈ 0.63 to 1.00**. This is not a data revision; it is a basket redefinition, and any chart of the update against the book must say so before it says anything else.

(2) **The sales/excise exclusion — 40.7649 at 1964.** The book excludes indirect business taxes because they are not levied on workers; Tonak's update keeps that boundary exactly (there is no sales/excise, indirect-business-tax, corporate-profits or estate/gift row anywhere in the workbook); and Moos keeps it in NSW1, moving indirect taxes into a *separate* alternative measure $NSW2 = NSW1 - T_3 \cdot LS$. The magnitude at stake is measurable from RED's own superseded reconstruction arm, which wrongly carried **sales_excise_tax_workers** = 40.7649 at 1964 — the single largest source of its $2.5406\times$ over-count ($T_1 = 111.0588$ against the book's printed 76.2). On Moos's line the same choice moves the headline by about five points of GDP and flips its sign: mean $NSW1/GDP +1.3\%$ against mean $NSW2/GDP -3.8\%$.

(3) **Moos's T_1 — combined employer-and-employee contributions, charged wholly to labour in the year paid.** T_{1a} is NIPA Table 3.6 line 1, *contributions for government social insurance, employer and employee combined*, allocated entirely to labour and *not* scaled by the labour share; deducted are military/veterans contributions (l. 14/16/30) and contributions by the self-employed (l. 26). Simultaneously E_1 credits that year's Social Security and Medicare outlays to labour at full value. Section 3 shows what rides on it.

3 The assumptions that decide the sign

A level difference is a measurement dispute. A *sign* difference is a conceptual one. Three assumptions, and only three, move the sign of the US net social wage in the held data.

3.1 The T_1 crux — Moos's own numbers

Measured from Moos's workbook, in billions of current dollars:

Year	NSW1	T_1	$NSW1 + T_1$ (<i>one-sided bound</i>)	T_1 as share of total labour taxes
1959	−7.6	12.8	+5.2	0.237
1969	−20.6	41.7	+21.1	—
1980	+38.5	160.5	+199.0	0.384
1990	+24.1	390.9	+415.0	—
2000	−29.0	673.4	+644.4	—
2010	+1198.0	934.6	+2132.6	0.475
2012	+1093.3	904.6	+1997.9	0.427

Removing T_1 alone flips 1959, 1969 and 2000 from negative to positive. The sign of the pre-2001 net social wage is decided by this one assumption — and T_1 grows from 24% to 48% of total labour taxes over the period, so the assumption's weight grows with it.

The bound is deliberately one-sided, and that is itself the finding. The right-hand column is *not* a proposed alternative estimate. A symmetric treatment — one that declines to charge today's contributions to

today's workers — would also have to strip Social Security and Medicare *benefits* out of E_1 . **That cannot be computed from the author's own data file.** Moos's workbook contains no programme-level E_1 split: no Social Security, Medicare, Medicaid, SSI, UI, SNAP or refundable-credit rows. E_1 is two NIPA aggregates plus a housing line. The nine-programme decomposition printed in her Table 5 (110 cells) and Figures 6/10/11 rests on data RED does not hold, and is recorded as NOT CAPTURED on the workbook arm rather than as agreement.

So the disputed treatment is not testable from the author's own data file. Adjudicating it requires a programme-level E_1 source that neither lane currently holds. That is a bounded, nameable acquisition — not an interpretive impasse.

3.2 The retirement question, exactly as the call framed it — and an honest gap

The question put to RED, as framed on the Tonak call, is whether social-insurance contributions should be charged to labour *in the year paid* at all, given that they purchase a claim on a future retirement benefit — i.e. whether the net social wage should be an ex-post current-flow incidence measure or should carry some actuarial or life-cycle accounting.

What Moos's construction *is*, from her own workbook: a **pure ex-post current-flow incidence measure**. Today's workers' contributions are set against today's retirees' benefits. There is *no* actuarial accounting, *no* discounting, and *no* split of contributions into a "deferred wage" component. She never flags this as a departure and presents the whole apparatus as Shaikh & Tonak's.

The honest note. The brief records that Anwar Shaikh disputes this treatment. **No document in RED's corpus states his objection.** Its content is therefore neither reproduced nor paraphrased anywhere in this study, and no position is attributed to him. What this report supplies instead is the machinery for adjudicating the dispute against evidence once the objection is on paper: the exact NIPA lines Moos uses, the exact one-sided magnitude at stake, and the name of the missing input. Whether Shaikh & Tonak (1987/2000) charged the *employer* half of social insurance to labour, and how they handled the intertemporal mismatch, is a question for the ST side of the corpus and is not asserted here.

3.3 The labour share — and a construction that ceases to be a mystery

The share applied to Group II differs across all four lines: the book prints **0.727 for 1964 only** (no annual book series exists — DIV-036); ST 2000 states **0.708**; Tonak's update carries an *annual New Labor Share* whose cell A32 reads only *Recalculated*; Moos uses $LS = NIPA \text{ Table 2.1 line 2} \div \text{line 1}$, which she describes in her own prose:

It should be noted that the labor share has declined over the period of study from a high of 0.73 to a low of 0.62.

QUOTE LEDGER QM00S-004 • moos2017wp • Section 4.3 'Rising Inequality and Methodological Issues', WP pp. 20-23; KB full_transcription.md line 367; re-read from source 2026-08-11

Lane 1 recorded the construction of Tonak's share as NOT CAPTURED. **Setting the two lanes side by side identifies it.** Tonak's *New Labor Share* and Moos's LS are *the same construction on different NIPA vintages*: they are identical to 10^{-12} in 17 of 54 overlapping years, the maximum deviation over 1959–2007 is 0.000536, and the whole discrepancy — maximum 0.007836 at 2012 — is concentrated in the years NIPA revised after Moos's file was frozen. At 1964 both read 0.7131.

This is offered as an identification, not a definition: it is not an exact reproduction, it was not adopted as a construction rule anywhere in the data, and confirming it requires Tonak's own statement. But it converts an unexplained cell into a testable claim, and it means the update and the Moos line share a weighting concept that the 1994 book does not.

3.4 What each line *does not* treat as a departure

Three choices are common to every post-book line and are therefore not candidates for explaining the divergence: veterans' and military benefits are excluded as a cost of war on all of them; Group III state-reproduction spending — defence, space, international affairs, the central executive/legislative/judicial functions, civilian safety, agriculture, economic development and regulation, net interest — is excluded on all of them; and transportation enters at a passenger/gas share on all of them (book implied 0.7035; Tonak 0.7 flat from 1960; Moos's annual GCONS, itself taken from Tonak 1987 for 1959–69).

Military benefits, such as veterans' pensions and health insurance, are treated as a cost of war, not as social policy. As discussed in Shaikh and Tonak (1987), administrative spending, police, and other expenditures are treated as the cost of the state reproduction, not part of the social wage for workers.

QUOTE LEDGER QM00S-002 • moos2017wp • Section 2 'Net Social Wage Methodology', WP pp. 3-4; KB full_transcription.md line 105; re-read from source 2026-08-11

4 What RED verified, and what it did not

4.1 Verified

- **Book line.** All 18 printed Table N.1 lines reproduce exactly; 8 rebuilt arms hit their printed 1964 anchors exactly; 10 of 11 Group-II labour cells reproduce independently as $\text{total} \times 0.727$; the three printed N.2 rate rows reproduce **114/114 cells** (38 of 38 years on each of the three rows). Anchors were moved from *tautological* (build output) to *printed-independent*. Family verdict 12 PASS / 3 FAIL before and after the rebuild — and the three FAILs are pre-existing and source-gated, none caused by the rebuild. *Correction, 2026-08-18.* The first issue of this report claimed 38/38 against a transcription of Table N.2 that had not itself been checked against the page. All 114 printed rate cells were subsequently re-read from a page image of p. 359 under a two-key rule — a 400 dpi whole-page render read in one pass, a 600 dpi render cut into nine separately-prepared tiles read in nine independent passes, no text layer at either key — and the two keys agreed on every cell. Against that reading the shipped transcription reproduced **110 of 114 cells**: the tax rate was wrong at 1969 (0.25 for a printed **0.26**) and the 1974/1975 tax cells were transposed (0.27/0.28 for a printed **0.28/0.27**), while the net transfer rate at 1980 carried -0.01 where the page prints **0.00** — a printed cell that had been silently replaced by the recomputed benefit-minus-tax value. The four cells were corrected at source and the affected series (S604, S607, S608, S609, S901, XS1103) and thirteen workbook cells rebuilt; 1964 and 1989, which carry every headline here, are unaffected. The 114/114 above is the post-correction figure.
- **Tonak 2025.** 62 checks: 44 PASS, 17 FAIL, 1 bounded probe — where every "FAIL" is either a label claim deliberately put to the test or a real reported divergence, and nothing was adjusted to make a check pass. Every aggregation identity closes to machine epsilon; 11 duplicate rows were proven byte-identical and folded.
- **Moos 2019.** 95 paper-vs-workbook cells: 89 agree at printed precision, 6 agree only under truncation toward zero, **0 discrepant**. Every workbook accounting identity closes (worst 2×10^{-12}). Two independent internal copies of the workbook's own rows agree exactly (32/32 and 162/162 cells).
- **Cross-lane.** The 19-row Moos assumptions inventory (A-01...A-19) separates [MOOS-STATED] from [WORKBOOK-OBSERVED] evidence on every row and never asserts the contents of Shaikh & Tonak from memory; RED's own `Moos_nsw_reconciled.csv` was proven byte-equal to Moos's workbook (so it is a transcription, not corroboration); and the update's tax-side basket was proven to match the book's exclusions exactly.

4.2 Not verified — recorded, never glossed

- **DIV-080 / DIV-081 / DIV-082** (§1) are open book-internal inconsistencies. DIV-082 in particular means the printed benefit column of Table N.1 does not sum to its own printed total, by an amount rounding cannot produce.
- **Annual book-faithful category detail does not exist** (DIV-036). Table N.1 prints 1964 only. Four distinct acquisitions are needed: the BEA/SSA annual social-welfare category panel 1952–1989; the book's *annual* labour-share series; the Tonak (1984) ch. IV homeowner-part property-tax split; and written confirmation of the Group III exclusion list.
- **Moos's programme-level E_1 split** (Table 5's 110 cells, Figures 6/10/11) is not in her workbook — NOT CAPTURED on that arm, and the precondition for adjudicating §3.1–3.2.
- **No price index of any kind** is in Moos's workbook, so her Real NSW1/NSW2 and the healthcare-deflated robustness series are unreproducible from it. **No GDP row** either, so every printed %GDP cell is NOT CAPTURED on the workbook arm.
- **Tonak's NSW as % of GDP row 3** (CMP-NSW-TONAK-004) is an unattributed fourth NSW arm whose construction is NOT CAPTURED — and it is the row that drives the NSW/GDP series Tonak charts. A bounded probe was run, recorded as REPORTED_NOT_ADOPTED, and no value was altered on its basis.
- **The four "% of EC" rows in Tonak's workbook are a proven defect:** they divide by the *year number* rather than by employee compensation ($1686.04/2000 = 0.84302$). They are retained as flagged defects and must never be used as ratios to EC.

- **The two PNG figures** in NSWComparisons-EAT_NA.docx were not digitized; seven plotted-only Moos artefacts were likewise left undigitized. No chart tracing was attempted anywhere.
- **Two citation-registry defects**, raised and not changed (the shared registry is outside this study's write scope): `moos2017wp` carries `alias_of: moos2019`, which is harmless as bibliography and *wrong* as a data-vintage claim; and `tonak2025update` is present only as a PENDING-BACKFILL stub while `moos_data_workbook` is absent entirely. A third defect was observed in passing: one registry key is a several-hundred-character run of quote text with `year: 6200`, evidently a backfill accident.
- **Verbatim Moos-2019 prose is not quotable** from RED's knowledge base: MOOS2019/FULL_TEXT.md is an *analytical digest*, not a transcription. Four of the five Moos quotes in the ledger are therefore cited to the 2017 working paper (which *is* a full transcription) and never to `moos2019`; the fifth is a quote-within-source and is marked for re-verification against the article PDF before publication use. The same caution attaches to Q-C1a-06, which is drawn from the KB digest of Appendix N prose and should be checked against a page image of p. 357.

5 The basis for a joint Tonak–Anderson commentary on Moos

What follows are **candidate theses**, stated neutrally, each tied to measured evidence held in this study. They are offered as the raw material for a comment piece in the *Review of Radical Political Economics*; none is a conclusion RED asserts, and none requires the authors to agree with each other before the evidence is stated.

T1. The comparison in the literature has been mislabelled. Every extant chart setting "Shaikh–Tonak" against Moos is, on the evidence here, setting *Shaikh & Tonak (2000) ch. 29* against Moos — not the 1994 book. *Evidence*: all seven Group-II component lines of the workbook's ST arm reproduce Table 29.1 exactly at 1964 and none matches Table N.1; the author says so himself (ledger Q-C1a-01). *Stake*: the 1964 net differs by 4.40 bn between the two vintages — larger than the entire ST-2000-to-Moos gap at that date.

T2. The 62 % "failure" in the reconciliation literature is an anchor-vintage artefact. *Evidence*: the 2017 working paper's mean NSW/GDP for 1959–97 is 0.011; the published 2019 value is 0.004; the reconstruction achieves 0.0042, i.e. it hits the published number and misses the working-paper number by 61.6 %. *Stake*: a published claim of irreproducibility would be wrong. This is a correction that costs Moos nothing and costs the reconciliation literature a false negative.

T3. The sign of the twentieth-century net social wage is an artefact of one accounting convention, and the convention is untestable from the published data. *Evidence*: T_1 alone flips 1959, 1969 and 2000; T_1 rises from 0.237 to 0.475 of total labour taxes; and the symmetric counterfactual cannot be computed because no programme-level E_1 split exists in the author's workbook. *Stake*: this is the strongest available form of the retirement objection *as a measurement claim*, and it can be made without attributing any position to anyone. It also names its own remedy.

T4. The largest divergence between the update and the book is a reweighting, not a revision. *Evidence*: Medicare + Medicaid + other medical care move from a Group-II weight of ≈ 0.63 to a Group-I weight of 1.00; worth zero at 1964, roughly 1.2 trillion by 2016. *Stake*: time-series comparisons of "the" net social wage across these vintages are comparing different objects after 1966, and increasingly so.

T5. Three authors, one tax boundary. *Evidence*: no sales/excise, indirect-business-tax, corporate-profits or estate/gift row appears anywhere in the update; Moos's T_2 contains no indirect term and puts indirect taxes in a separate NSW2; the book excludes them by prose. *Stake*: the boundary is a point of *agreement* across thirty-one years, which makes it the natural fixed point of any reconciliation — and it identifies RED's own superseded reconstruction (which carried 40.7649 at 1964) as the outlier rather than any author.

T6. The interpretive turn in Moos (2019) is not a measurement turn. Moos reads a *positive* net social wage as evidence of deteriorating conditions — the state assuming responsibility for the part of labour-power's value that capital does not directly remunerate — explicitly against the "myth of the social wage" framing:

the main task of the state's management of labour-power is to assume responsibility for the part of its value which capitalists do not directly remunerate

QUOTE LEDGER QM00S-005 • `moos2019` • Section 6 'Discussion', quoting de Brunhoff (1978: 19); Moos (2019) pp. 18-20;

KB MOOS2019/FULL_TEXT.md line 102; re-read from source 2026-08-11. QUOTE-WITHIN-SOURCE: these are de Brunhoff's words as reproduced

Evidence: none of the social-reproduction framing enters the accounts. There is no imputation for unpaid reproductive labour, no household-composition split, no gender split and no childcare-specific line anywhere in the workbook; the categories are exactly the ST NIPA aggregates. *Stake*: a commentary can engage the interpretation on its own terms without disputing a single number — and, symmetrically, anyone reading the framing as a change in measurement would be wrong.

T7. Two of the update's own category labels do not describe what the cells contain, and one of its component rows is an open question the author himself flagged (Q-C1a-04, Q-C1a-05). *Stake*: these are corrigenda a joint commentary can carry cleanly, because they were found by identity search and hold to machine precision.

T8. Tonak's "NSW (MOOS)" row is not Moos's series and should not be charted as such. *Evidence*: deviation up to 127.071 bn against her own workbook, never coinciding in 54 years, with the divergence traceable to E_1 at 1964 (27.7 vs 32.3). *Stake*: a labelling convention — "Moos method as implemented by Tonak (2025)" — that costs nothing and prevents a misattribution.

What a commentary would still need before publication. A programme-level E_1 source (T3's pre-condition); a second capture of p. 358 (DIV-082); Tonak's confirmation of the **New Labor Share** construction (§3.3) and of the postal and T_1 open questions; the numbers behind the two PNG figures; the missing **social security diff new vs old data.xlsx**; a verbatim transcription of Moos (2019) to replace the analytical digest; and — if the retirement dispute is to be reported at all — Anwar Shaikh's objection *in writing*, since it is not in the corpus.

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Artefacts. `nsw_comparative_registry.json` (umbrella index, comparison-set definitions, synthesis findings SYN-1...SYN-5) • `NSW_COMPARISON.xlsx` (7 sheets) • `SYNTHESIS_REPORT.md` (build log and acceptance checks) • `scripts/` (reproducible builders) • lane artefacts in `st_tonak_line/` and `moos_line/`, which this study read and never wrote.