

Purpose

- Provide latest update on the economic condition of the U.S.
 - Background
 - Current Status
 - Future Options
 - Impact of COVID on Hospital C-V-P Relationships

- 2

US Economic Condition & COVID Impact

Context

- The Western World continues to age-out
- Elderly ratios highest in the world
 - (Age 65+ / Ages 15-64)*100
 - World ave .: 14.8
 - USA: 25.6
 - European Union: 32.9
 - Japan: 51.0



US Economic Condition & COVID Impact

Context

- WW-II Generation dying at 1,000 / day
- Baby-Boomers turning 65 and joining Medicare at 10,000 / day
 - Multiplying the drawdown on Medicare & Social Security by 10:1 every day!
 - Boomers 90% of Medicare enrollees by 2030
 - Born 1947–1965



A

- Context
 - · WW-II Generation dying at 1,000 / day
 - Baby-Boomers turning 65 and joining Medicare at 10,000 / day

 Multiplying the drawdown on Medicare & Social Security by 10:1

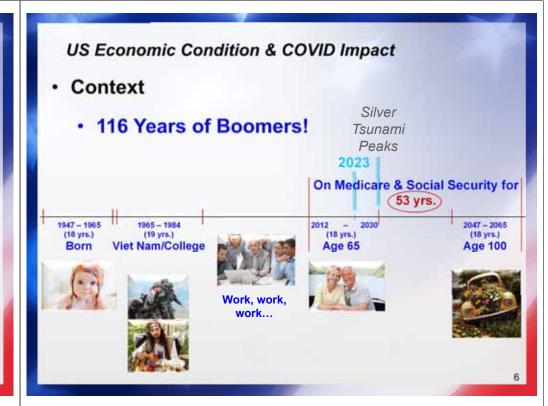
every day!

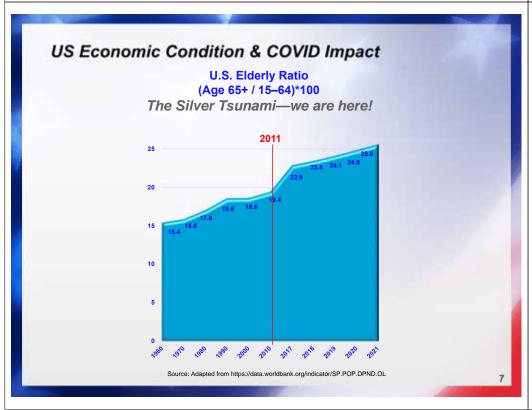
 Boomers 90% of Medicare enrollees by 2030

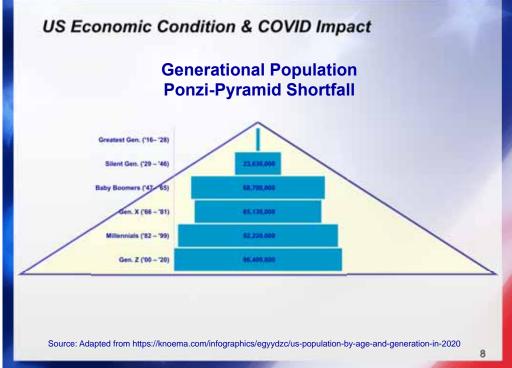
Born 1946–1963

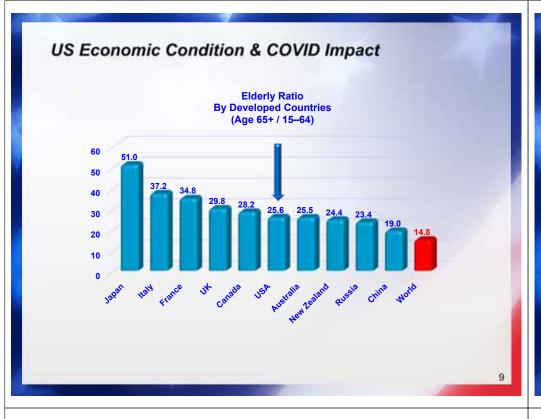












- In contrast: the growing developing world
 - Elderly ratios <u>lowest</u> in the world

- Brazil: 13.7

- Iran: 10.7

- South Africa: 9.1

- Pakistan: 7.2

- Nigeria: 5.5

- Afghanistan: 4.4

- Qatar: 1.7



0

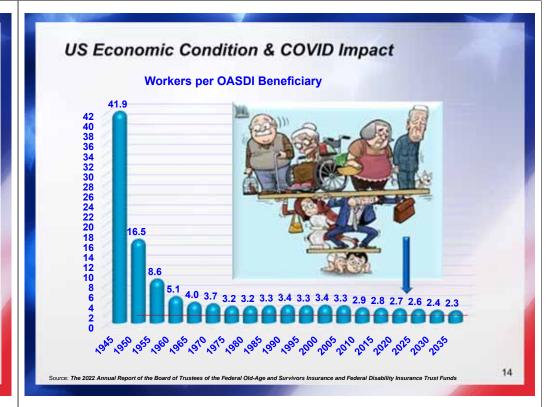
Elderly Ratio By Developing Countries (Age 65+ / 15-64)*100 14.8 13.7 12.3 10.7 10.1 9.1 7.7 7.2 5.8 5.5 4.8 4.4 3.7 1.7 10 and bred travel rear rear parts by the parts before the parts by the parts

US Economic Condition & COVID Impact

- · Creating an international healthcare crisis
 - The same regardless of country or social system
 - · Unlimited, increasing demand
 - · Compounded by COVID-19, in the face of
 - · Limited resources
 - · Resources have to be allocated somehow
 - · Every country tries a different way
 - · All have their problems
 - · Economics: the "Dismal Science"
 - Optional solution is where everyone is equally unhappy!

Early, previous century economists: Moses & Jerome Horwitz, and Louis Feinberg.





US Economic Condition & COVID Impact

Key Definitions:

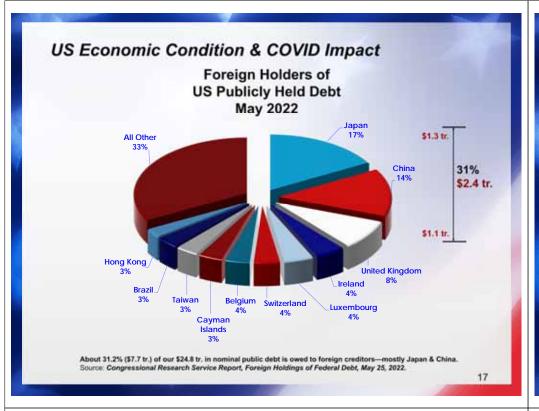
- Deficit—government's net loss for one year
- Debt—money government borrows
 - · Loans, used to:
 - Pay bills (i.e., cover the deficit)
 - Expand money supply

US Economic Condition & COVID Impact

Key Definitions:

- Sources of Debt Financing
 - Public debt-loans from
 - · General public
 - · Foreign governments, mostly
 - Japan \$1.3 tr.
 - · China \$1.1 tr.
 - Usually reported in the media





Key Definitions:

- Government debt—loans from
 - · Other US government agencies
 - Bonds
 - Non-marketable "Certificates of Indebtedness" Congressional IOUs
 - Backed by the "full faith and credit of the U.S. Congress"



18

US Economic Condition & COVID Impact

Key Definitions:

- Largely borrowed \$5.4 tr. from:
 - Medicare Trust Funds
 - Hospital Insurance (HI)
 - Supplementary Medical Insurance (SMI)

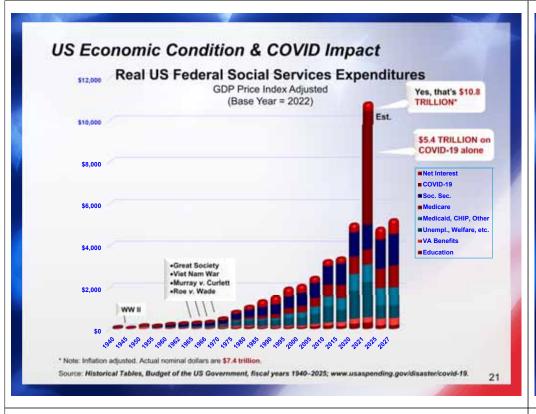


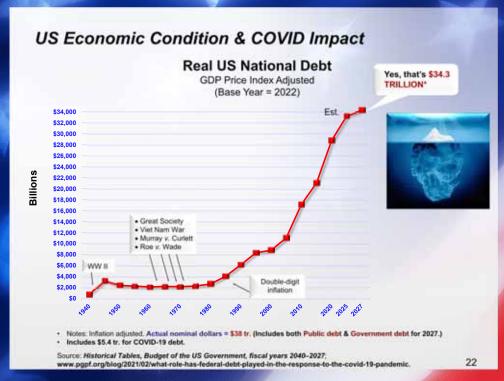
- Old-Age & Survivors Insurance (OASI)
- Disability Insurance (DI)
- Not allowed to invest in stock market
- Can only lend to other government agencies at interest

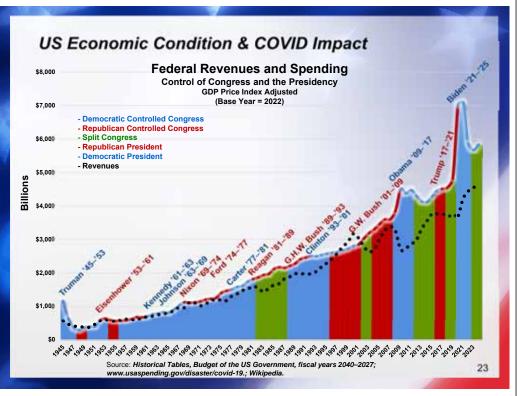
US Economic Condition & COVID Impact

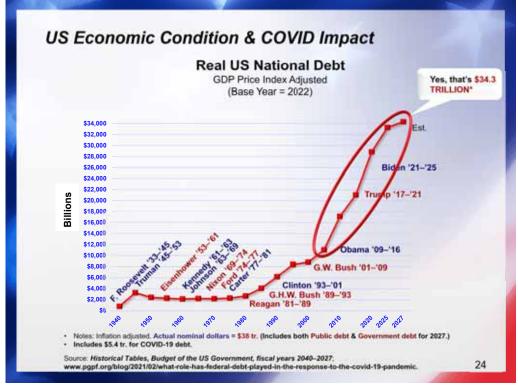
Key Definitions:

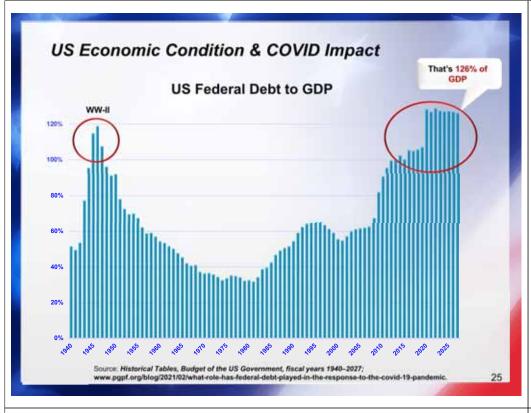
- Government debt
 - Borrowed money from Trust Funds then spent on programs
 - Principal & int. just rolled into new bonds & IOUs
 - IOUs expected to be repaid with
 - Future tax collections
 - (So we pay-in twice!)
 - Proceeds from issuing more Public debt

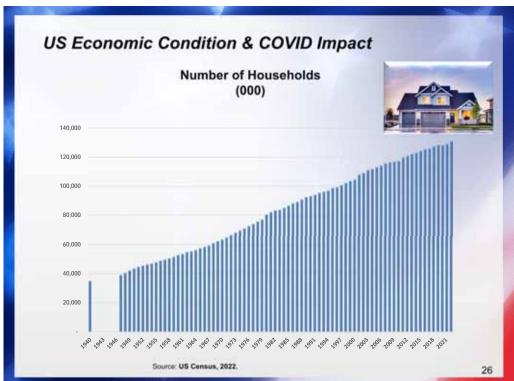


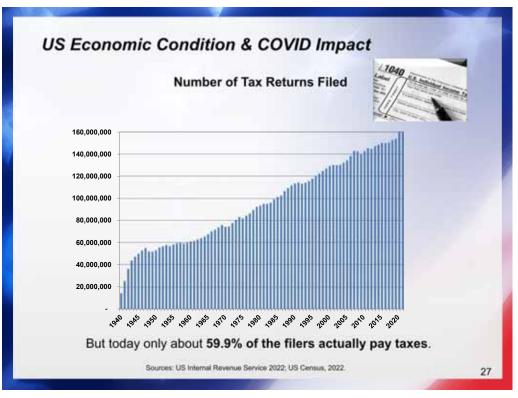


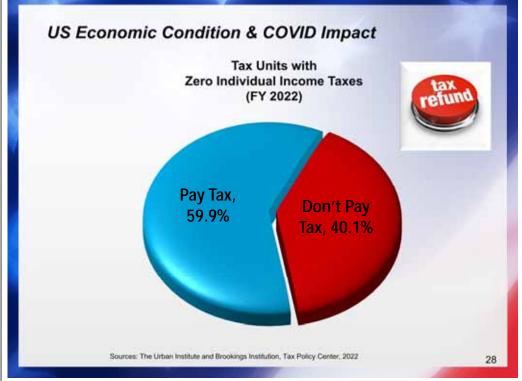


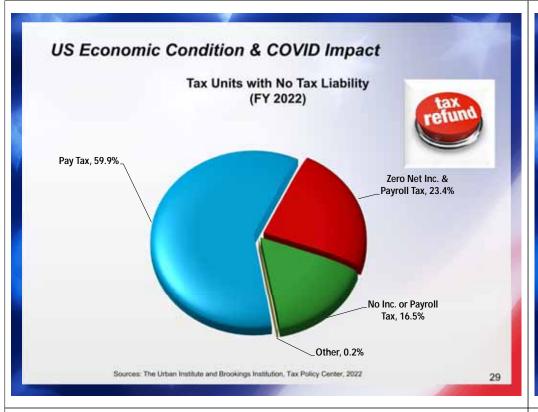


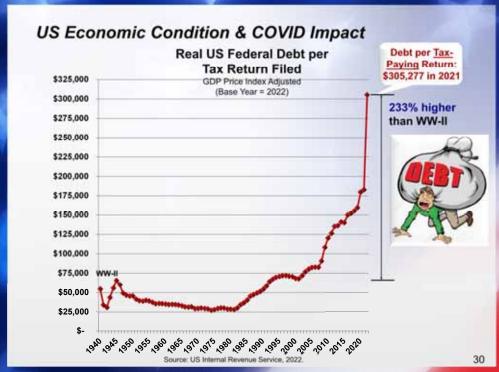












- Selected Obligations at Current Benefit Rates
- \$ 38.0 tr. US National Debt (2025 nominal dollars)
- 107.5 tr. PV of Social Security
- 84.5 tr. PV of Medicare (less premiums)
- 75.9 tr. PV of Fed. Medicaid, CHIP & Other
- 22.3 tr. PV of VA Benefits
- 46.0 tr. PV of 50 State Medicaid, unfunded pension and other postemployment benefits
- + 5.9 tr. Cost of renovating our 50–100+ year old infrastructure (roads, bridges, levees, dams, water, sewer, rail, schools, aviation, transit, etc.
- \$ 380.1 tr. Obligations left to the next generation to repay,

when they will have <u>half</u> the relative collective earning power than when Medicare was started. (Dropping to 2.3 workers per retiree by 2030.)

US Economic Condition & COVID Impact

Selected Obligation Analysis

1. What is our net worth?

Total household & NP org. net worth = \$143.3 tr. (2021)

\$380.1 / \$143.3 = 265%

We owe more than twice our total net worth.

If we confiscated all of the wealth in the country, we could only pay for 38% of these selected obligations.

Total GLOBAL wealth = \$463.6 tr.

Our share is only \$143.3 / \$463.6 = 31%.

We would have to consume \$380.1 / \$463.6 = 82% of the entire world's wealth to meet our obligations (more than twice our share)!

Selected Obligation Analysis

2. How much do we make?

\$380.1 tr. In obligations divided over 131,202,000 households =

\$2,896,752 in obligations / household.

Median household income = \$70,784

2,896,752 / 70,784 = 41 years of income.

The combined federal & state governments would have to tax away the entire median income of every household in America for the next 41 years in order to pay off just these obligations.

Or alternatively, since under a 100% income tax all of the taxpayers would die of starvation in the first two weeks, maybe amortize over <u>75 ye</u>ars:

55% income tax for the next (75 years) would work better.

That's 22 years beyond the time to get the last boomer through the system...

33

US Economic Condition & COVID Impact

Selected Obligation Analysis

That is, we need \$380.1 – \$143.3 = \$236.8 tr. more wealth than we have to meet these obligations!

That's more than all of the wealth of Europe, China, India, Latin America, and Africa combined:

	Wealth	Pop. (mm
Europe	\$106,330	748
China	85,107	1,412
India	14,225	1,408
Latin America	12,579	654
Africa	5,808	1,341
	\$224,049	5,562



Will they just hand us all of their wealth to support us in our nursing homes, while their own populations of 5.562 BILLION people starve? **Not.....**

Source: World Bank, Credit Suisse Global Wealth Report Nov. 2022

34

US Economic Condition & COVID Impact

Selected Obligation Analysis

That 55% tax rate for the next 75 years assumes <u>all</u> of the tax revenues would go to <u>nothing else</u> but paying off just these few selected obligations...

They are expected to consume 80% of the federal budget by 2030. Crowding-out all other government services, if not cut.

US Economic Condition & COVID Impact

Selected Obligation Analysis

- Do you want things like: operating our defense, schools, fire department, police, transportation, water, sanitation, criminal justice system, and the multitude of other entitlements, grants, subsidies and programs in the federal budget...
- If we want all those too, the tax rate goes up from there...
 - Some economists estimate an 83%+ combined federal & state tax rate to meet these demands

– Observations:

 We have become the greatest <u>debtor</u> nation in the entire <u>history</u> of the world.



....

US Economic Condition & COVID Impact

– Observations:

"... the principle of spending money to be paid by posterity, under the name of funding, is but **swindling** futurity on a large scale"

—Thomas Jefferson

Source: Thomas Jefferson, Letter to John Taylor, May 28, 1816, National Archives, https://founders.archives.gov/documents/Jefferson/03-10-02-0053.

38

US Economic Condition & COVID Impact

— Observations:

"A democracy cannot exist as a permanent form of government. It can only exist until the people discover they can vote themselves largess out of the public treasury. From that moment on, the majority always votes for the candidate promising the most benefits from the public treasury, with the result that democracy always collapses over a loose fiscal policy—to be followed by a dictatorship."

— Alexander Fraser Tytler, Lord Woodhouselee

Source: www.goodreads.com/author/quotes/5451872.Alexander_Fraser_Tytler

US Economic Condition & COVID Impact

Selected Obligation Analysis

Sources, adapted from:

American Society of Civil Engineers Budget of the US Government

Credit Suisse Global Wealth Report

Financial Report of the US Government Medicare Trust Funds Annual Report

ProPublica

Social Security Trust Fund Annual Report

US Census

US Congressional Budget Office

US Department of Commerce

US Federal Reserve

US Internal Revenue Service

World Bank

Other

- The economic options:
 - 1. Raise taxes
 - Just gave IRS \$80 b. in new funding to collect more taxes
 - 2. Cut benefits
 - Just Spent \$5.2 tr. on COVID subsidies
 - Just Passed \$1.65 tr. Federal Spending bill
 - Once the toothpaste is out if the tube, it's awfully hard to get it back in!
 - Social Security, voting seniors would be most hurt
 - No one ever won an election by promising to "Raise taxes and cut benefits"
 - 3. Grow the economy
 - Was growing nicely before COVID lockdowns
 - But would require sustained double-digit growth for decades
 - Which we've never had, while
 - Still recovering from effects of the COVID lockdowns, the Ukraine war and supply chain disruptions
 - As 30% of pop. retires out of the workforce

US Economic Condition & COVID Impact

- The economic options:
 - 4. Default on payments
 - 2% Sequestration was suspended
 - Now reinstated
 - · A default on Federal Obligations
 - For years, the Trustees have called for a 25% cut in benefit payments
 - Would be a 25% default, if sequestered
 - So far, no takers



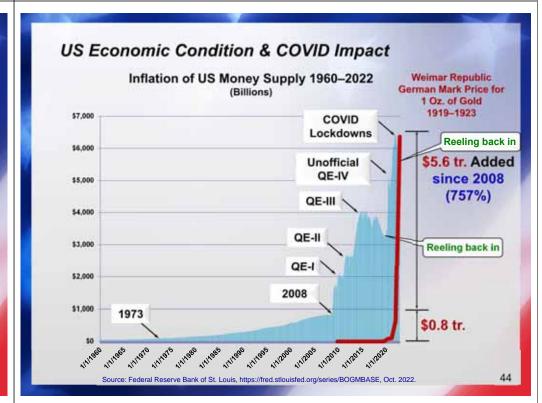
42

US Economic Condition & COVID Impact

The economic options:

→ 5. Continue Inflating the Currency

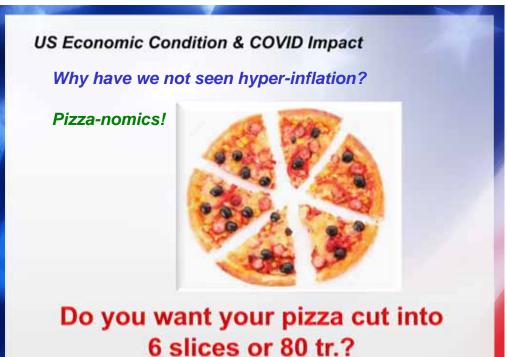
- Federal Reserve inflated the money supply by \$5.6 tr.
 - Were reeling back in, until lockdowns, war, etc.
- Giving Federal gov't. dollars it needs to pay bills
 - And earning interest on the printed-up dollars!



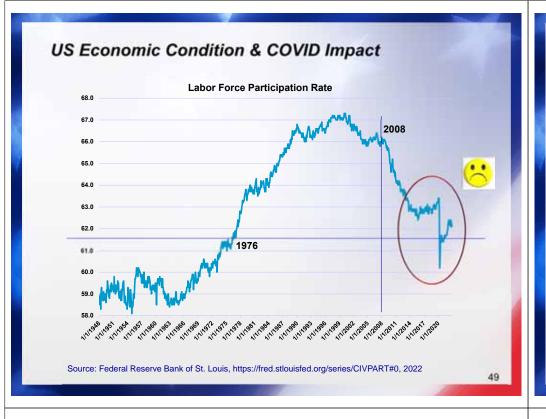
43











US Economic Condition & COVID Impact But Can't We Just Keep Borrowing from Peter to Pay Paul?

Our prior century economists tried this in their 1957 —
 A Merry Mixup (with Joseph Wardell)



50

US Economic Condition & COVID Impact



US Economic Condition & COVID Impact

— Observation:

"... first by inflation, then by deflation, the banks
... will deprive the people of all property until
their children wake up homeless on the
continent their Fathers conquered."
—Attrib. to Thomas Jefferson (never verified)

Source: www.monticello.org/research-education/thomas-jefferson-encyclopedia/private-banks-spurious-quotation/

- No one understands these issues better than David Walker, former Comptroller General of the United States
- When asked what he plans to do, he replied:
 - · "Well, my house is paid for,
 - I get a pension at full salary for life, just like a Supreme Court judge, and
 - I'm thinking about Vancouver, because New Zealand is too far away."



53

US Economic Condition & COVID Impact

- No one understands these issues better than David Walker, former Comptroller General of the United States
- When asked what he plans to do, he replied:
 - · "Well, my house is paid for,
 - I get a pension at full salary for life, just like a Supreme Court judge, and
 - I'm thinking about Vancouver, because New Zealand is too far away."





54

US Economic Condition & COVID Impact

So, how did the \$5.4 tr. in COVID subsidies impact Hospitals?

Wall Street Journal (Front Page Article) 12/5/2022

"Covid Aid Went to Hospitals That Didn't Need the Money"



US Economic Condition & COVID Impact

- We* examined how
 - COVID-19 and the
 - Gov't. Subsidies to Support Access to Care
- Affected Cost-Volume-Profit (CVP) relationships in
 - U.S. Hospitals
- And how that impact varied with Type of Control
 - For-profit (FP)
 - Non-profit (NP)
 - Governmental (GOV)

- 0-

^{*} Coauthored with: **Arpita Shroff** at University of Houston Downtown, **Benedikt M. Quosigk** at Kennesaw State University, and **Rabih Zeidan** at Texas A&M University Corpus Christi.

TABLE 1 Sample Derivation

Beginning Sample Data (hospital years 2011-2020)	61,935
Less: Hospital years with missing or out of range data values	(27,729)
Less: Long Term Care hospital years	(5,100)
Less: Hospitals with less than 10 years of data	(7,106)
Less: Hospitals that changed control type	(1,500)
Final Sample (2,050 unique hospitals with 10 years of data)	20,500

Note: Data is from U.S. Centers for Medicare & Medicaid Services, *Hospital Cost Report Form CMS 2552-10.*

57

59

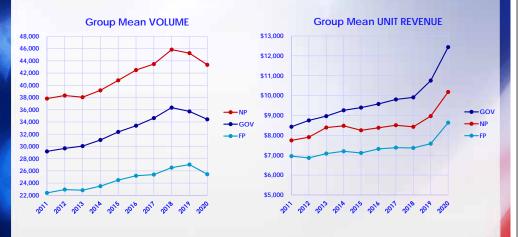
US Economic Condition & COVID Impact

Control Variables:

- NP, FP, GOV Type of Control
- Governmental District Hospital
- Teaching Hospital
- Specialty Hospital
- Urban location
- State
- Multihospital System Chain Member
- Number of Beds
- Case Mix Index
- Staffing Ratio
- Length of Stay
- Occupancy Rate
- Outpatient %
- Return on Assets
- Total Debt / Total Assets
- COVID Years 2020-2021

58

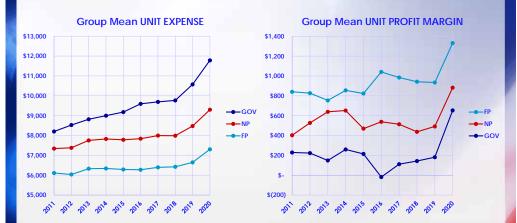
US Economic Condition & COVID Impact



VOLUME (Adjusted patient volume):

Discharges \times (1 – Readmission Rate) \times CMI \times (OP Chgs. + IP Chgs.) / IP Chgs.

US Economic Condition & COVID Impact



We compared groups:

- NP vs. FP
- NP vs. GOV
- FP vs. GOV

And found significant differences (≥ 95% confidence) between

- All groups
- All tested variables

61

US Economic Condition & COVID Impact

Limitations:

We examined only:

- Short-Term Acute Care Hospitals
- Specialty Hospitals
- In the U.S.
- Complete data for the 10-year period

We did not examine:

- Critical Access Hospitals
- Long Term Care Hospitals
- Hospitals in other countries

Medicare's readmission rate measurement program:

- · Limited number of procedures included
- · Limited number of hospitals included

We are waiting to complete the 2021 data set

62

US Economic Condition & COVID Impact

Conclusions:

The economic incentives inherent in different forms of Control are significantly associated with hospital responses to the pandemic crowding-out effects

- In the COVID period, Revenues, Expenses and Volumes generally increased
- However, Unit Revenues, Unit Expenses, and Volumes were
 - Lower for FPs than NP, GOV, DISTR
 - Higher for GOV than FP, NP, DISTR

US Economic Condition & COVID Impact

Conclusions:

Clinicians say—

"We hope the hospitals shared some of that Subsidy money with us."

Answer—

- The higher Expenses indicate, "Yes, some of it."
- The higher Profit Margins indicate, "But not all of it."



-

Any Questions?

Corresponding Author:

Dana A. Forgione, Ph.D., CPA, CMA, CFE

Morningside Ministries Senior Living Communities

Endowed Chair of the Jessie Frances Neal Foundation & Clifton W. Coonrod Endowment, and Professor of Accounting, TAMU-CC Adjunct Professor, Cardiothoracic Surgery, School of Medicine, UT Health Adjunct Professor, Pediatrics, School of Medicine, UT Health Faculty, Graduate School of Biomedical Sciences, Translational Science Ph.D. program, UT Health Adjunct Professor of Public Health, School of Public Health, UTSPH

College of Business Texas A&M University Corpus Christi 6300 Ocean Drive Corpus Christi, TX 78412-5808 USA Tel.: +1.361.825.5560 Email: dana.forgione@tamucc.edu Internet: www.tamucc.edu









