

Costs, Tradeoffs, and Unintended Consequences of International Mormon, Seventh-day Adventist, and Jehovah's Witness Growth



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Conflict of Interest Disclosures



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Level of Evidence



JBJS, Inc. Journals Level of Evidence

The Level of Evidence should be assigned for all Clinical articles according to the definitions in the following table (as explained in our January 2015 editorial).

Levels of Evidence for Primary Research Question^{1,2}

Study Type	Question	Level I	Level II	Level III	Level IV	Level V
Diagnostic— Investigating a diagnostic test	Is this (early detection) test worthwhile? Is this diagnostic or monitoring test accurate?	<ul style="list-style-type: none"> Randomized controlled trial Testing of previously developed diagnostic criteria (consecutive patients with consistently applied reference standard and blinding) 	<ul style="list-style-type: none"> Prospective³ cohort⁴ study Development of diagnostic criteria (consecutive patients with consistently applied reference standard and blinding) 	<ul style="list-style-type: none"> Retrospective⁵ cohort⁴ study Case-control⁶ study Nonconsecutive patients No consistently applied reference standard 	<ul style="list-style-type: none"> Case series Poor or nonindependent reference standard 	<ul style="list-style-type: none"> Mechanism-based reasoning Mechanism-based reasoning
Prognostic— Investigating the effect of a patient characteristic on the outcome of a disease	What is the natural history of the condition?	<ul style="list-style-type: none"> Inception³ cohort study (all patients enrolled at an early, uniform point in the course of their disease) 	<ul style="list-style-type: none"> Prospective³ cohort⁴ study (patients enrolled at different points in their disease) Control arm of randomized trial 	<ul style="list-style-type: none"> Retrospective⁵ cohort⁴ study Case-control⁶ study 	<ul style="list-style-type: none"> Case series 	<ul style="list-style-type: none"> Mechanism-based reasoning
Therapeutic— Investigating the results of a treatment	Does this treatment help? What are the harms? ⁷	<ul style="list-style-type: none"> Randomized controlled trial 	<ul style="list-style-type: none"> Prospective³ cohort⁴ study Observational study with dramatic effect 	<ul style="list-style-type: none"> Retrospective⁵ cohort⁴ study Case-control⁶ study 	<ul style="list-style-type: none"> Case series Historically controlled study 	<ul style="list-style-type: none"> Mechanism-based reasoning
Economic	Does the intervention offer good value for dollars spent?	Computer simulation model (Monte Carlo simulation, Markov model) with inputs derived from Level-I studies, lifetime time duration, outcomes expressed in dollars per quality-adjusted life years (QALYs) and uncertainty examined using probabilistic sensitivity analyses	Computer simulation model (Monte Carlo simulation, Markov model) with inputs derived from Level-II studies, lifetime time duration, outcomes expressed in dollars per QALYs and uncertainty examined using probabilistic sensitivity analyses	Computer simulation model (Markov model) with inputs derived from Level-II studies, relevant time horizon, less than lifetime, outcomes expressed in dollars per QALYs and stochastic multilevel sensitivity analyses	Decision tree over the short time horizon with input data from original Level-II and III studies and uncertainty is examined by univariate sensitivity analyses	Decision tree over the short time horizon with input data informed by prior economic evaluation and uncertainty is examined by univariate sensitivity analyses

Level of Evidence IV
(case series, surveys of limited quality)

Level of Evidence V
(oral histories, observational/anecdotal studies, mechanism-based reasoning)

1. This chart was adapted from OCEBM Levels of Evidence Working Group. "The Oxford 2011 Levels of Evidence," Oxford Centre for Evidence-Based Medicine, <http://www.cebm.net/ocbml-levels-of-evidence/>. A glossary of terms can be found here: <http://www.cebm.net/glossary/>.

2. Level-I through IV studies may be graded downward on the basis of study quality, imprecision, indirectness, or inconsistency between studies or because the effect size is very small; these studies may be graded upward if there is a dramatic effect size. For example, a high-quality randomized controlled trial (RCT) should have ≥80% follow-up, blinding, and proper randomization. The Level of Evidence assigned to systematic reviews reflects the ranking of studies included in the review (i.e., a systematic review of Level-II studies is Level II). A complete assessment of the quality of individual studies requires critical appraisal of all aspects of study design.

3. Investigators formulated the study question before the first patient was enrolled.

4. In these studies, "cohort" refers to a nonrandomized comparative study. For therapeutic studies, patients treated one way (e.g., cemented hip prosthesis) are compared with those treated differently (e.g., cementless hip prosthesis).

5. Investigators formulated the study question after the first patient was enrolled.

6. Patients identified for the study on the basis of their outcome (e.g., failed total hip arthroplasty), called "cases," are compared with those who did not have the outcome (e.g., successful total hip arthroplasty), called "controls."

7. Sufficient numbers are required to rule out a common harm (affects >20% of participants). For long-term harms, follow-up duration must be sufficient.

Introduction to Levels of Evidence in Research Methodology:
Journal of Bone and Joint Surgery

<https://journals.lww.com/jbjsjournal/Pages/Journals-Level-of-Evidence.aspx>

Data and Sources



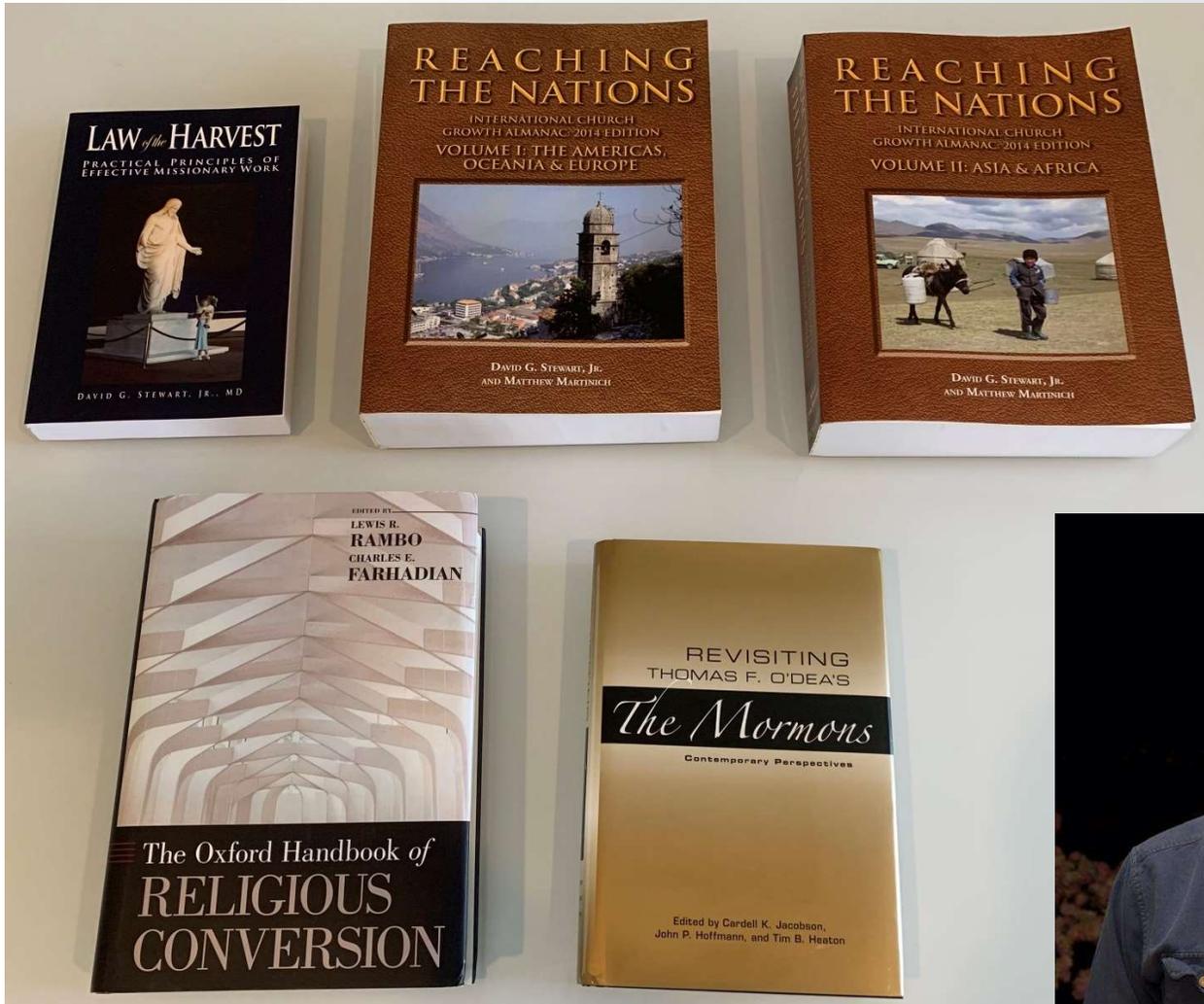
LDS Meetinghouse, Reykjavik, Iceland

- LDS national membership and congregation statistics (*LDS Church Almanacs*, *lds.org*)
- Human Development Index (*UN Development Program*)
- GDP per capita (International Monetary Fund)
- Annual Yearbooks of the Jehovah's Witnesses 1982-2017
- Seventh-day Adventist Annual Reports (*AdventistStatistics.org*)
- LDS activity rates, national outreach percent (*Reaching the Nations*)
- Regression analysis and charts - Minitab statistical software and Microsoft excel

Author Background



- Missiology: Study of Church Growth



Areas Visited



Economics as a Social Science



- Why do some organizations implement successful solutions with relative ease, whereas others struggle to implement basic and obvious measures?
- Economics provides powerful explanatory tool for the study of human and organizational behavior, including church growth
- Offers new perspectives beyond traditional historical and sociological research
- Constructive insights “outside of the box.”



Frankfurt,
Germany



Disruptive Innovation

- Adaptation needed in rapidly-changing social landscape
- Yesterday's answers may not work for today's problems
- Even "timeless" answers may need different presentations and implementation
- Advantage to agile, timely and responsive
- Some faiths still fighting yesterday's wars and "closing barn doors after horse is out of the barn"
- "Adapt or perish, now as ever, is nature's inexorable imperative" HG Wells

The Google logo, featuring the word "Google" in its characteristic multi-colored font (blue, red, yellow, green, blue, red).The Netflix logo, consisting of the word "NETFLIX" in red, uppercase letters on a black rectangular background.The Amazon.com logo, featuring the text "amazon.com" in black, lowercase letters with a curved orange line underneath.

Christian Restorationist Movements



- Christian new religious movements
- Founded in US in 19th century
- Background of Second Great Awakening
- Restoring beliefs and practices of early Christianity
- Changes of Protestant Reformation not enough
- Restoration or “Second Reformation”



Christian Restorationist Movements

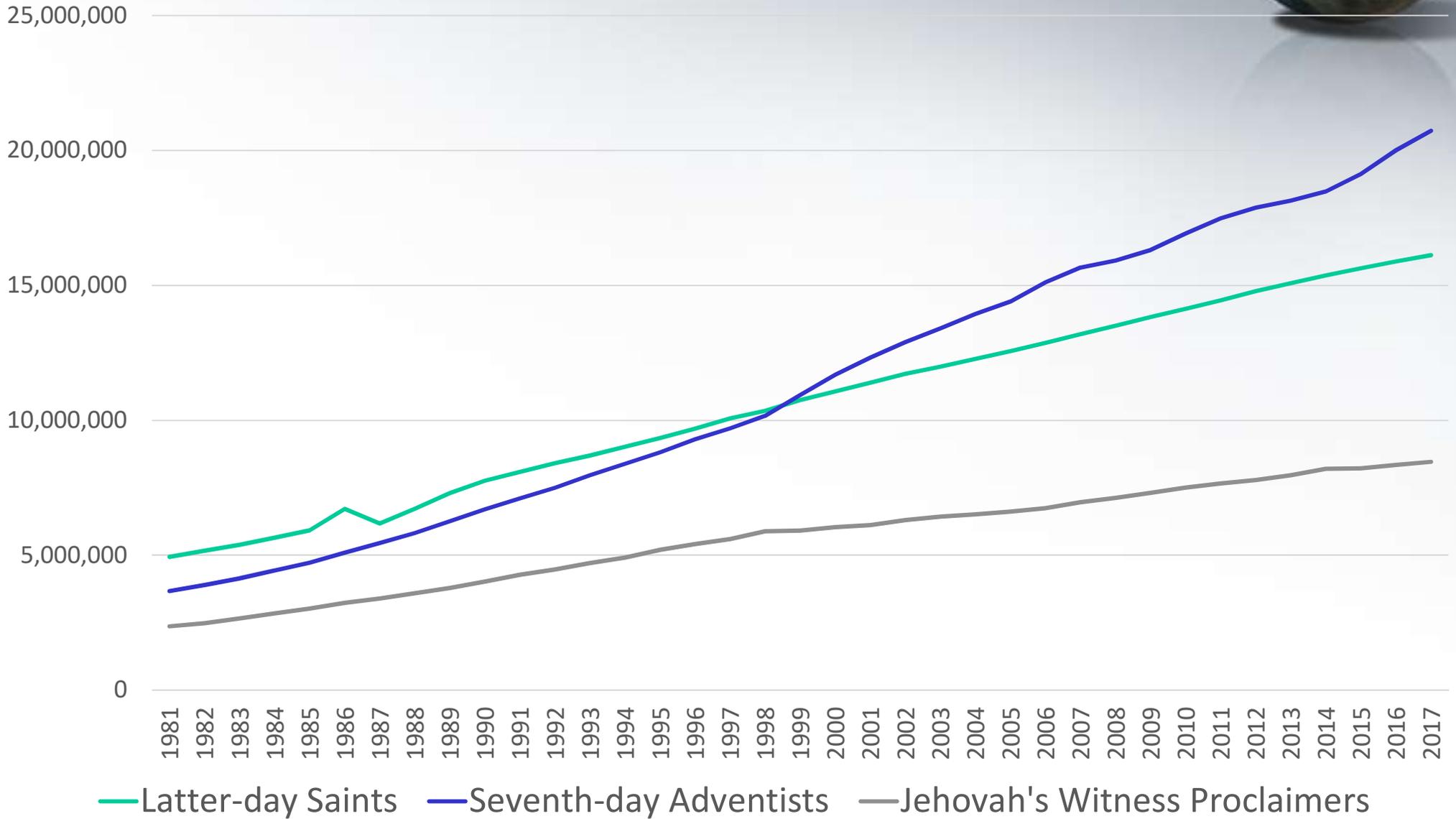
- Church of Jesus Christ of Latter-day Saints (LDS or Mormon Church) — Joseph Smith – Fayette, New York, 1830
- Seventh-day Adventist Church — Ellen White – Battle Creek, Michigan, 1863
- Watch Tower Bible and Tract Society (Jehovah's Witnesses) – Charles Taze Russell – Pittsburg, Pennsylvania (formed 1881, incorporated 1884) – Influenced by Millerite branch of Adventism
- Global outreach and growth



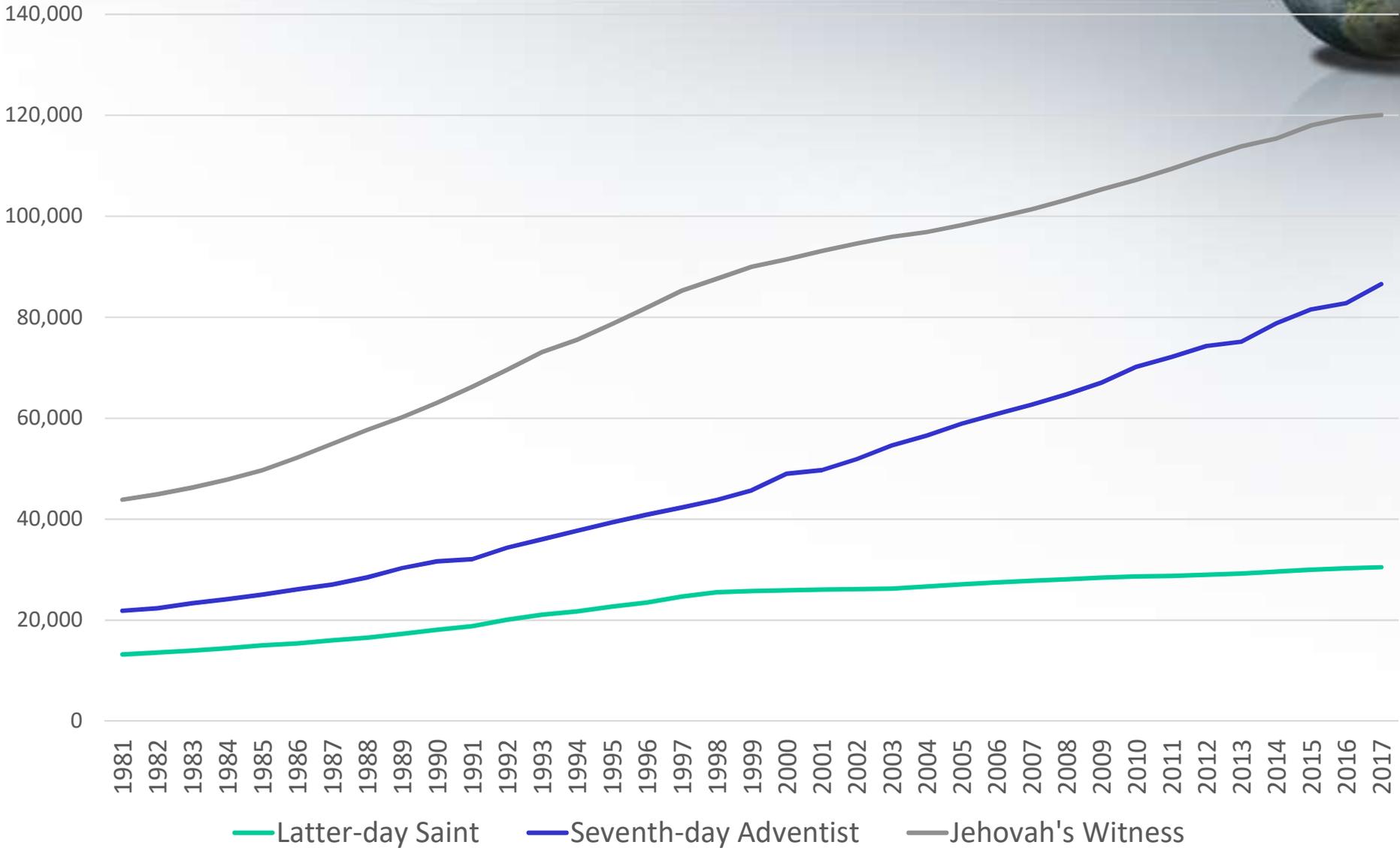
Seventh-day Adventist Church, Kyiv, Ukraine



Adherent Growth

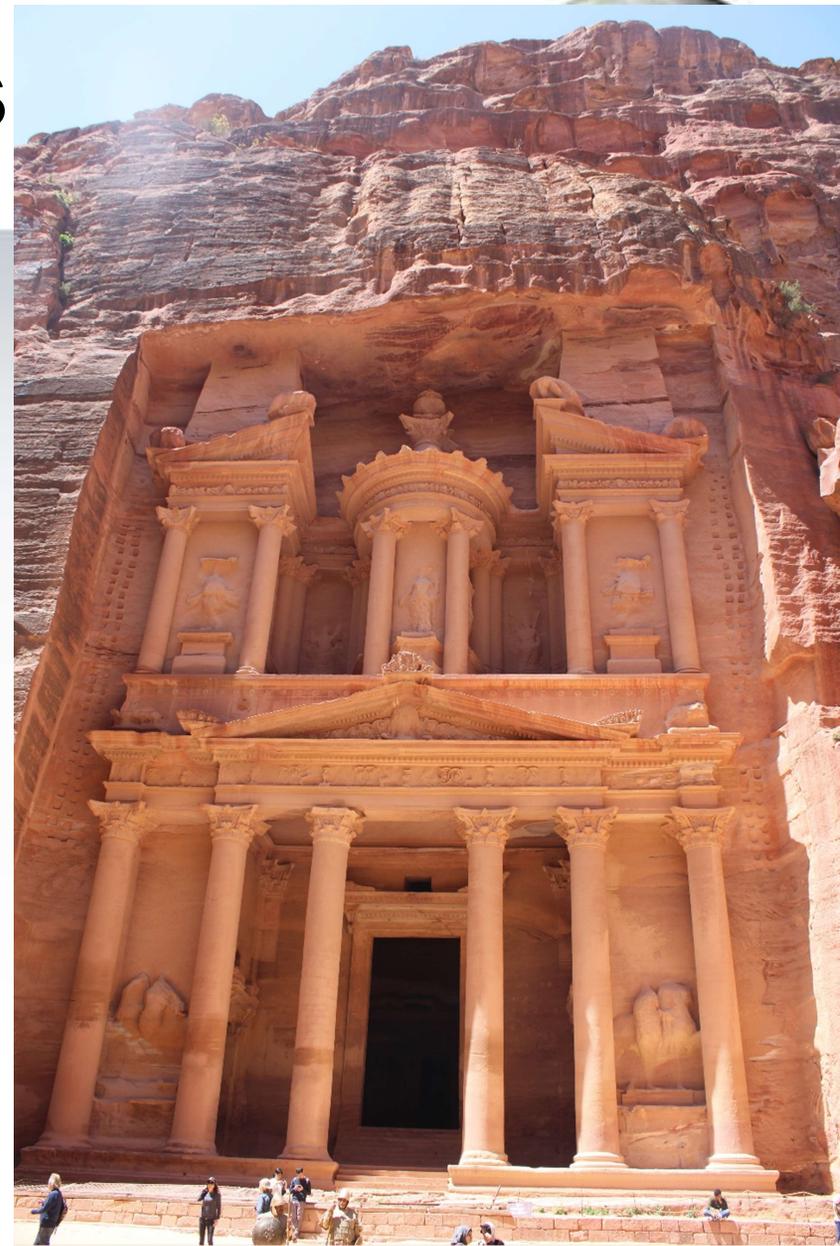


Congregational Growth



Insights from Economics

- Must look back to earlier stages in organizational development to find current causes
- Determine an organization's incentives and tradeoff
- Prior decisions sowed the seeds of current results
- Selection of one developmental path closes off or limits other options
- Established organizations are constrained by a narrower set of possibilities than less differentiated organizations.



The Treasury, Petra, Jordan

Incentives and Tradeoffs



Faiths have traditionally conveyed their policy decisions as divinely inspired

Economics as a social science involves the study of incentives as motivating human and organizational behavior

Policy choices involve tradeoffs

Few are all positive or all negative

Net effect depends greatly on circumstances

Each policy carries a cost

Who bears the cost can impact incentives for decision-makers



Manti, Utah LDS Temple

Gathering to Zion

Latter-day Saints gathered converts to “Zion” in Midwest, then in Mountain West

Seventh-day Adventists and Watchtower Society (parent organization of Jehovah’s Witnesses) built up local congregations with intent of permanence

Tradeoffs:

Cohesive Mormon society in Utah homeland

Control to create religious utopia or “Utahpia”

Limit outside interference

LDS Church defined itself as an American faith, dependent for growth on the preaching of foreign missionaries rather than personal evangelism by local members

Cloistered leadership



Independence Day Parade, Provo, Utah



Isolation versus Integration



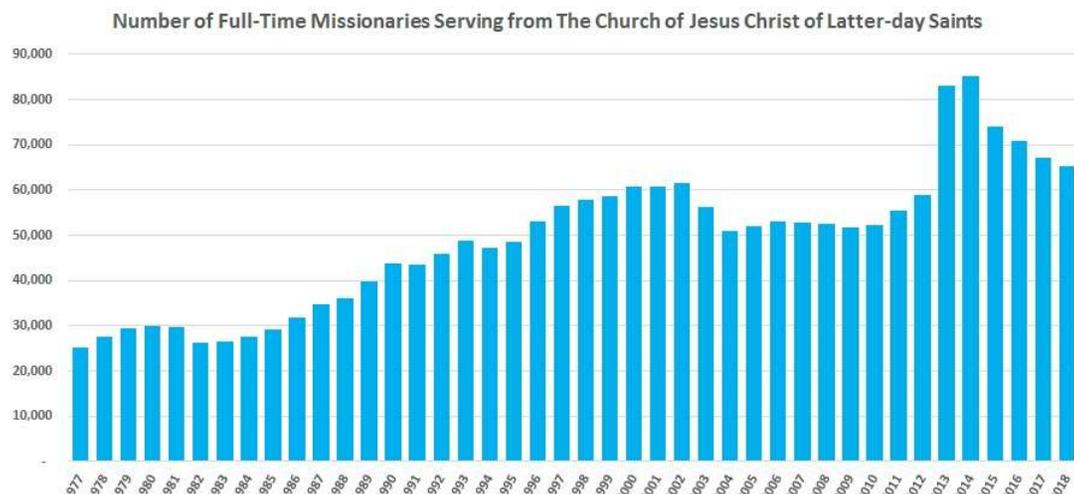
LDS Temple, Salt Lake City, Utah

- Allowed Mormon leaders to shape a society
- Greater political and economic clout
- Mormon member retention promoted by cultural as well as religious institutions
- Disconnect from non-Mormons generally
- Few non-Mormons to preach to locally
- Cloistered leadership with few opportunities to gain broader insights into personal evangelism

Missionary Work as Itinerant



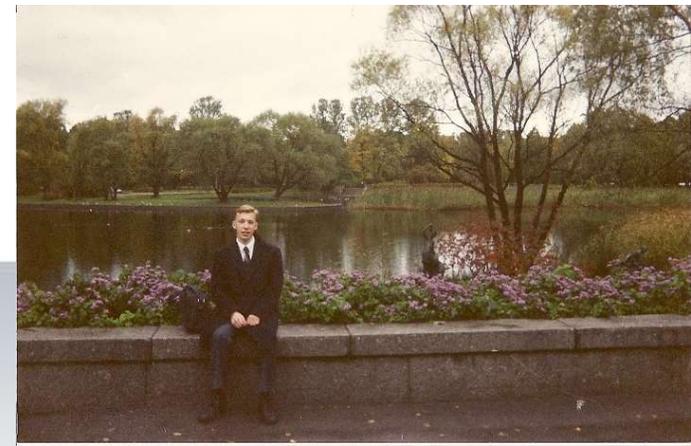
- LDS Church – Itinerant missionary work as permanent model
- SDA and JW – Itinerant preachers found congregations, but responsibilities are soon transitioned to local adherents.
- Itinerant missionary work compartmentalized engaged “on demand”
- Life-cycle “rite of passage” for young Mormon men transitioning to adulthood and subsequent family life
- Missionaries not connected to local communities
- No incentive for quality in building strong local strong local congregations and no accountability
- Dynamic favors quick baptisms over lasting conversion
- Personal evangelism as an compartmentalized activity rather than as a norm of gospel living.



Source: MormonMissionPrep.com



Preaching the Gospel as a Priesthood (Adult Male) Duty



- Male missionary service presented as a requirement (or highly desirably quality) for marriage to a faithful Mormon young woman
- Mormon women spent time in domestic roles bearing and raising children
- Encouraged larger families and higher birth rates
- Mormon women not systematically engaged in personal evangelism
- Research from other faiths shows that women are more likely to be engaged in personal evangelism than men
- 2/3 of Jehovah's Witness proclaimers in the US are women (Pew Research Center); international data suggest similar ratios
- Women primary nurturers of children in the home; Mormon children not taught to share faith as a matter of nurture and upbringing, and most full-time missionaries have little or no prior experience at personal evangelism
- Quantity over quality – some young men serve due to cultural or social expectations rather than spiritual reasons.

Celebrification and Cloistering of Leadership



- LDS leaders believed to be literally called by Jesus like early apostles
- Wide-ranging authority
- Current counsel of Church leaders considered authoritative and on par with scripture.
- Teachings for new conditions rather than relying only on interpretation of ancient scripture.
- Cloistered leadership
- Limited opportunities for firsthand observation and participation
- Celebrification has propagated downstream to lower authorities
- Most mission presidents formulate policies without ever going door to door to make new contacts or teaching a single missionary lesson.
- Disconnect hampers the quality of insight.
- “Leadership by Example” apparently deemed not to apply to Mormon missionary work
- Many managers but few leaders.



Meetinghouse Policy

LDS practice of building expensive US-style meetinghouses for small international congregations

Arises from missionary work as itinerant rather than indigenous activity.

Colonial mentality attempting to re-create Utah church worldwide instead of seeking indigenous identity and expression.

In 2001, LDS Church spent estimated \$2.5 million to construct a meetinghouse in Ufa, Russia (Mir Religii)

By 2003, Seventh-Day Adventists in Russia and Ukraine purchased 291 church meeting places, including apartments, cottages, and other sites, for a total of \$3.5 million (Adventist News Network).

LDS Church called “the rich church” in Ghana due to large meetinghouses built with Western funds (SLTrib)

“Opportunity Cost” - High investment in a few congregations precludes most opportunities for expansion and response to time-sensitive opportunities

The “Rich Church” is also the “small church” in reach and membership

Hampers local self-sufficiency, autonomy, and indigenous identity.



Avtovo Ward LDS Meetinghouse,
Saint Petersburg, Russia

LDS Meetinghouse,
Chisenau, Moldova



Mormon Polygamy



- Cost of membership increased commitment
- Sharpened cultural distinctions between Mormons and non-Mormons as “separated from the world”
- Facilitated by isolation in concentrated communities of believers
- Lasting negative externalities
- Galvanized opposition as well as commitment
- Cost-shifting to future generations
- Stumbling-block to belief in revelatory claims
- Insights from game theory
- Prisoner’s Dilemma and Cooperation vs. Competition
- Anti-cooperative actions from weaker group incur long-term costs

Utah Reformation (1856-57)

- Strengthened commitment of Mormons
- Increase cohesion
- Maintain purity from outside influences
- 7,000 non-Mormons and dissidents fled Utah
- Brigham Young removed as territorial governor
- Negative press worldwide
- Negative externalities
- 5 to 7 times as many articles about LDS Church in British press, 80% negative, 1% positive (Cary ASM 2019)
- Convert baptisms in UK fell from 55,000 in prior decade (1846-1855) to 18,000 during decade of Utah Reformation (1856-1865) (Bartholomew ASM 2019)
- Membership in United Kingdom dropped from 22,500 to 15,000 over the Reformation period.
- Repressive behaviors towards non-Mormons were counterproductive for a faith which depended entirely upon proselytism for convert growth.



Religious Exclusivism vs Christian Pluralism



- LDS Church – “Only True Church”
- Jehovah’s Witnesses – “God’s organization on earth”
- Seventh-day Adventists – backed off from exclusivist claims to “mainstream”
- Exclusivist denominations have greater impetus for worldwide mission outreach
- Better able to enforce orthodoxy of doctrine and practice
- Opposition and ostracism for “sheep stealing”
- Claims to exclusivity prohibited as “religious extremism” under Russia’s 2016 “anti-terrorism” law.

Global Dynamics of Non-Exclusivism



- Seventh-day Adventists (Christian pluralist)
- Focus on proselytizing non-Christians instead of competing with other Christians in competitive and shrinking religious markets
- Pragmatic decision-making:
 - Focus outreach resources to receptive areas with few Christians
 - Little investment in areas of low receptivity (Europe)
- Low Cost, High Yield: Higher “Return on Investment”
- Over half of Adventists live in Sub-Saharan Africa and Asia, especially India

In 2015, there were:

5,705 Adventist primary schools worldwide with 1,188,910 students

2,336 Adventist secondary schools with 583,946 students

114 Adventist tertiary institutions with 142,530 students

Adventist schools in Eastern Europe in 2012 12 (48 in 2017, +50 by 2022)

- Mormons (exclusivist) convert relatively few non-Christians; outreach program largely assumes Christian background

Family Policies



Emphasis on patriarchal family and traditional gender roles

Promotes marriage within the faith

Strong families

Higher birth rate

Control of cultural institutions

Marginalization of those who do not fit ideal

Not only LGBTQ individuals, but

Those who cannot find a suitable spouse or lack opportunity

Some outside Utah heartland pressured into marriages with unsuitable partners based on overriding criterion of religious activity

Divorcees excluded from leadership

THE FAMILY A PROCLAMATION TO THE WORLD

THE FIRST PRESIDENCY AND COUNCIL OF THE TWELVE APOSTLES
OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

WE, THE FIRST PRESIDENCY and the Council of the Twelve Apostles of The Church of Jesus Christ of Latter-day Saints, solemnly proclaim that marriage between a man and a woman is ordained of God and that the family is central to the Creator's plan for the eternal destiny of His children.

ALL HUMAN BEINGS—male and female—are created in the image of God. Each is a beloved spirit son or daughter of heavenly parents, and, as such, each has a divine nature and destiny. Gender is an essential characteristic of individual premortal, mortal, and eternal identity and purpose.

IN THE PREMORTAL REALM, spirit sons and daughters knew and worshipped God as their Eternal Father and accepted His plan by which His children could obtain a physical body and gain earthly experience to progress toward perfection and ultimately realize their divine destiny as heirs of eternal life. The divine plan of happiness enables family relationships to be perpetuated beyond the grave. Sacred ordinances and covenants available in holy temples make it possible for individuals to return to the presence of God and for families to be united eternally.

THE FIRST COMMANDMENT that God gave to Adam and Eve pertained to their potential for parenthood as husband and wife. We declare that God's commandment for His children to multiply and replenish the earth remains in force. We further declare that God has commanded that the sacred powers of procreation are to be employed only between man and woman, lawfully wedded as husband and wife.

WE DECLARE the means by which mortal life is created to be divinely appointed. We affirm the sanctity of life and of its importance in God's eternal plan.

HUSBAND AND WIFE have a solemn responsibility to love and care for each other and for their children. "Children are an heritage of the Lord" (Psalm 127:3). Parents have a sacred duty to rear their children in love and righteousness,

to provide for their physical and spiritual needs, and to teach them to love and serve one another, observe the commandments of God, and be law-abiding citizens wherever they live. Husbands and wives—mothers and fathers—will be held accountable before God for the discharge of these obligations.

THE FAMILY is ordained of God. Marriage between man and woman is essential to His eternal plan. Children are entitled to birth within the bonds of matrimony, and to be reared by a father and a mother who honor marital vows with complete fidelity. Happiness in family life is most likely to be achieved when founded upon the teachings of the Lord Jesus Christ. Successful marriages and families are established and maintained on principles of faith, prayer, repentance, forgiveness, respect, love, compassion, work, and wholesome recreational activities. By divine design, fathers are to preside over their families in love and righteousness and are responsible to provide the necessities of life and protection for their families. Mothers are primarily responsible for the nurture of their children. In these sacred responsibilities, fathers and mothers are obligated to help one another as equal partners. Disability, death, or other circumstances may necessitate individual adaptation. Extended families should lend support when needed.

WE WARN that individuals who violate covenants of chastity, who abuse spouse or offspring, or who fail to fulfill family responsibilities will one day stand accountable before God. Further, we warn that the disintegration of the family will bring upon individuals, communities, and nations the calamities foretold by ancient and modern prophets.

WE CALL UPON responsible citizens and officers of government everywhere to promote those measures designed to maintain and strengthen the family as the fundamental unit of society.

This proclamation was read by President Gordon B. Hinckley as part of his message at the General Relief Society Meeting held September 23, 1995, in Salt Lake City, Utah.

Spiritual vs. Secular Engagement

Jehovah's Witnesses:

“The human institutions called churches...are merely social clubs” (Charles Taze Russell)

Focus all effort and resources on preaching

No ecclesiastically-sponsored social activities or sport

8.36 million Witnesses totaled over 2 billion preaching hours in 2018

Average over 20.6 preaching hours per month per Witness

Continuing growth even in difficult fields

Highest per capita missionary effort of any faith

Lowest education level of any group in US

Among the lowest earners of any faith

Financial hardships and limited career prospects



Jehovah's Witness in Tartu, Estonia

Organizational Failures - “Every Member a Missionary”



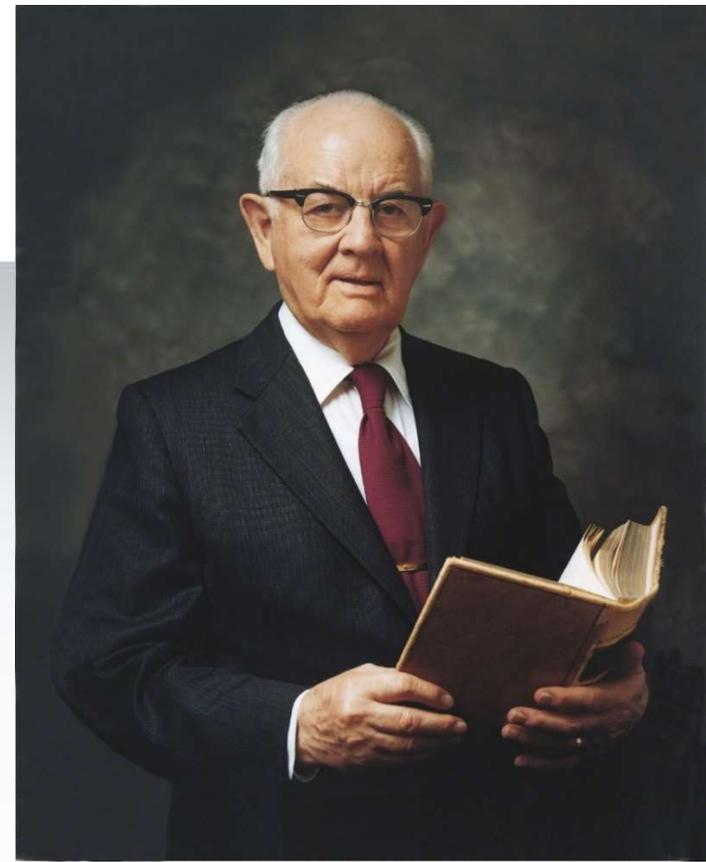
- David O. McKay – 1959 “Every Member a Missionary”
- Only 3-5% of Mormons regularly participate in missionary work (M. Russell Ballard 2000)
- Only 26% of self-identified US Mormons reported sharing their faith in the past month, compared to 61% of Pentecostals and Assemblies of God members, 57% of non-denominational Christians, and 30-35% of all US Christians (Barna 2001)
- Prophetic directive unable to overcome prior institutional choices:
- Sharing the gospel an adult male (only) responsibility for compartmentalized periods of full-time callings – not a regular element of gospel living for all members.
- Missionary work as itinerant instead of indigenous, sending instead of being
- Gathering to Zion – Mormon culture built on isolation from non-Mormons
- Leaders and members alike with little if any experience of sharing the gospel with friends and neighbors – only with strangers far from home.

Organizational Failures - Global Mission Planning

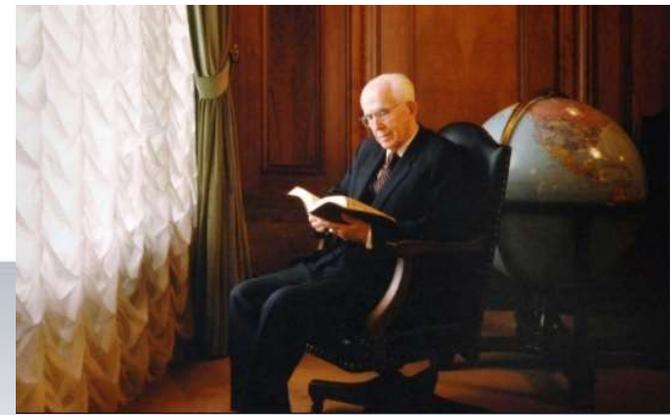
- “When we have used the satellite and related discoveries to their greatest potential and all of the media—the papers, magazines, television, radio—all in their greatest power; when we have organized numerous other stakes which will be springboards; when we have recovered from inactivity the numerous young men who are now unordained and unmissioned and unmarried; then, and not until then, shall we approach the insistence of our Lord and Master to go into all the world and preach the gospel to every creature.”
- “We need to enlarge our field of operation. We will need to make a full, prayerful study of the nations of the world which do not have the gospel at this time, and then bring into play our strongest and most able men to assist the Twelve to move out into the world and to open the doors of every nation as fast as it is ready.”
- Kimball, Spencer W., “When the World Will Be Converted,” Ensign, October 1974.

Seventh-day Adventists – Global Mission - 1990

Increasing SDA convert growth as LDS convert growth has declined
SDA growth credited to well-planned global mission outreach



Organizational Failures - “Flooding the Earth with the Book of Mormon”



- Ezra Taft Benson’s admonition to “flood the earth” with the Book of Mormon (1988)
- 5-5.6 million copies printed annually in early 2000s
- Less than \$1 per year per LDS member on missionaries copies of Book of Mormon
- Less than one copy distributed per full-time missionary per week
- Widely disavowed by church bureaucrats who felt ETB’s emphasis was “wasteful.”

- JW Watchtower and Awake! Magazines – 42 and 41 million copies per issue
- JWs distributing over 5,000 tons of literature annually in Russia in early 1990s
- Why was ETB’s prophetic mandate “dead on arrival?”
- LDS Church as Utah-based cultural community which printed primarily for local devotees
- Watchtower Bible and Tract Society (parent organization of Jehovah’s Witnesses) founded by Charles Taze Russell as a publishing house for outreach literature.
- “Every Member a Missionary” and “Flood the Earth with the Book of Mormon” have been empty slogans lacking serious or widespread implementation.
- Contrasts to “feel-good do nothing” programs like the missionary dinner program which have taken on a life of their own.

Implementing Change



- A faith's current policy options are influenced by its history, structure, and prior organizational decisions
- Greater switching costs at boundaries of constraints
- Boundaries may change over time



SLTRIB.COM

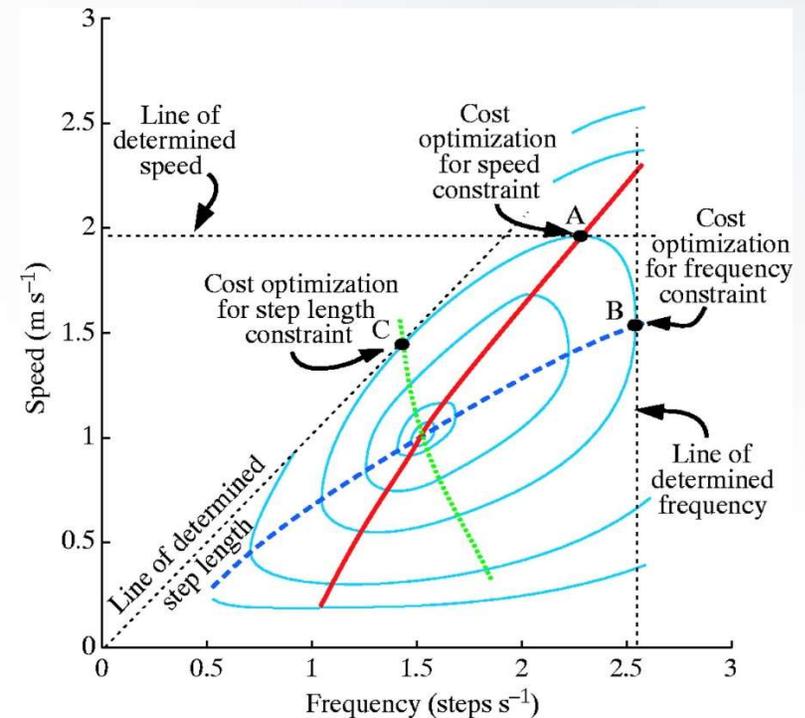
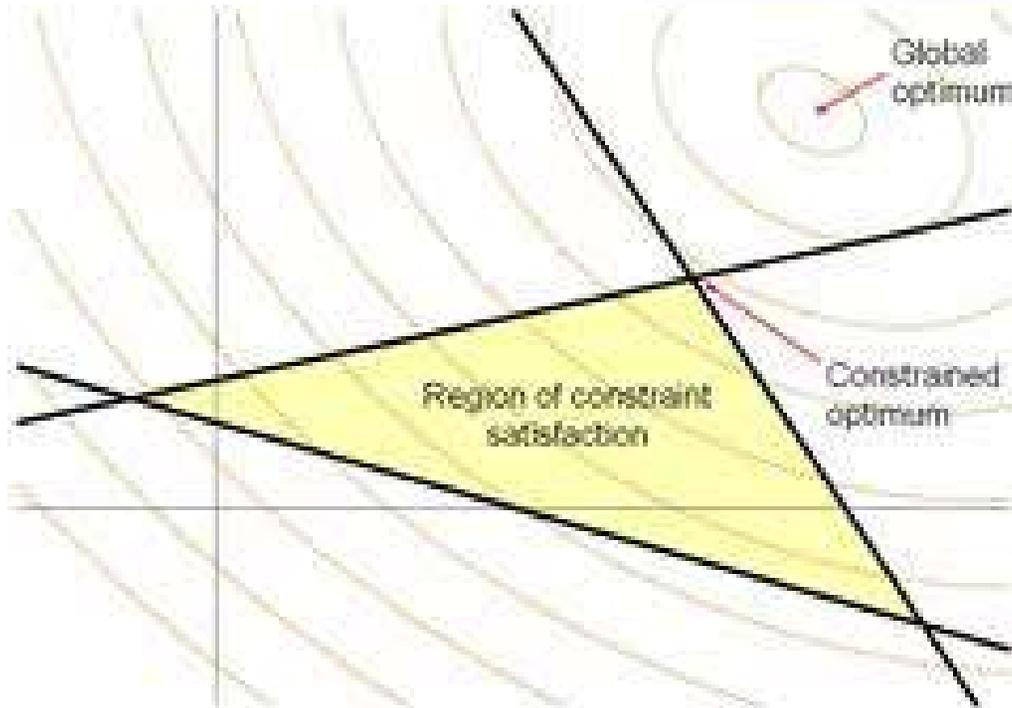
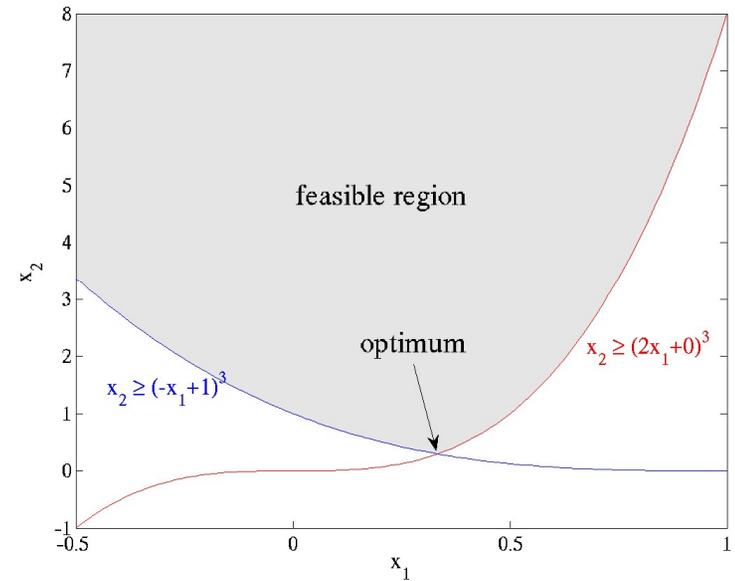
In a major change, Latter-day Saints to allow women and girls to be witnesses for baptisms, a function previously reserved for...

“Constrained Optimum”

The “Global Optimum” may be located outside of a “feasible region”

“Constrained optimum” is the closest to the “global optimum” within the bounds of existing constraints

“Global Optimum” may change over time as societal conditions change

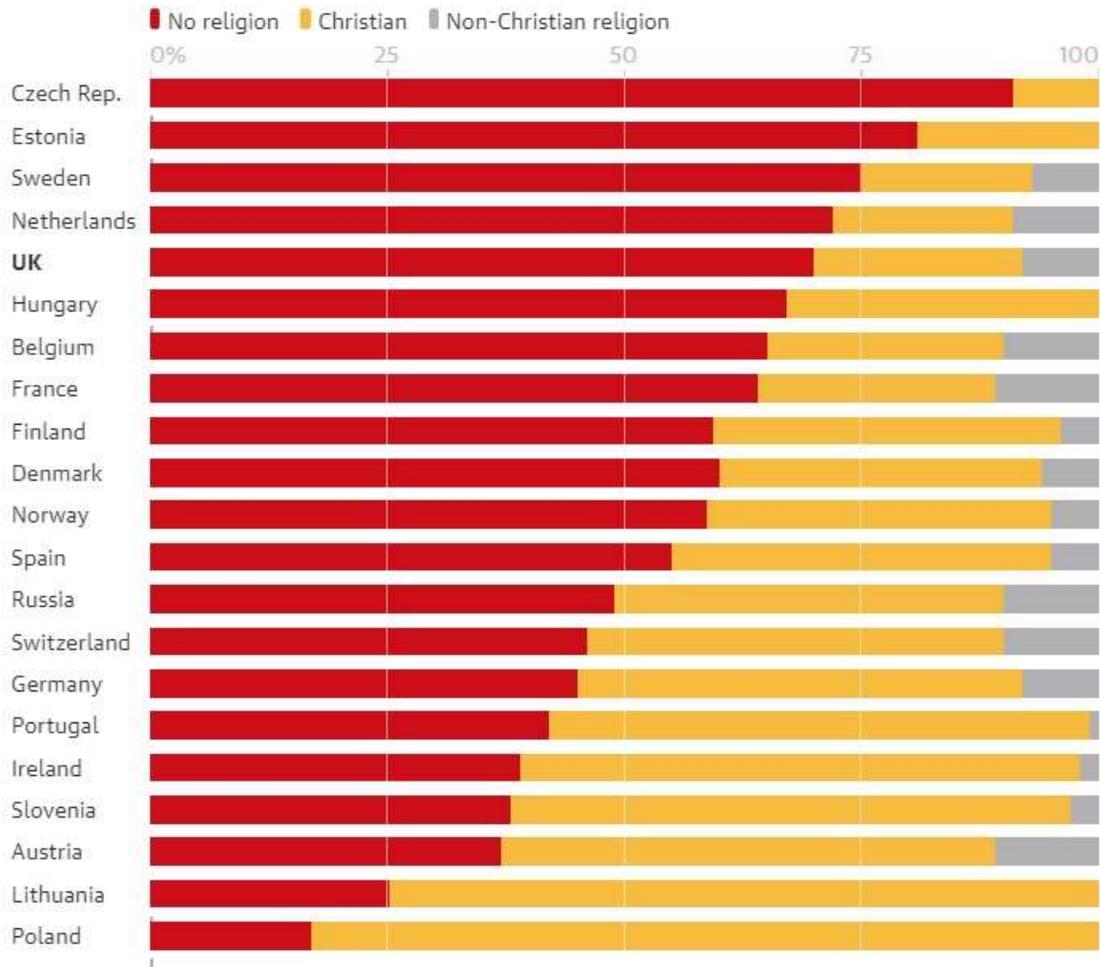


Changing Societal Conditions



Young Adult Religiosity

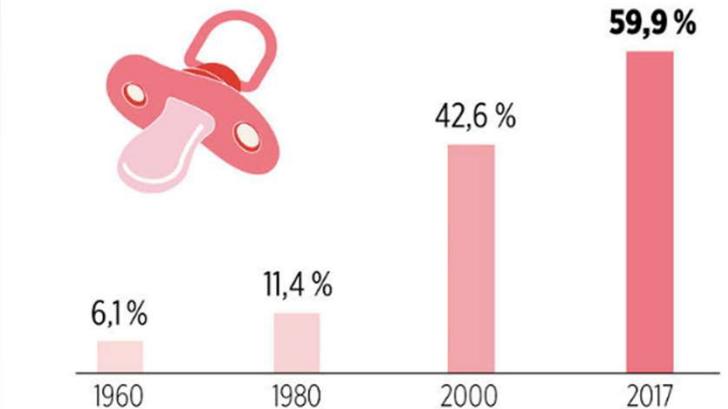
How 16- to 29-year-olds self-identify, %



Births Outside of Marriage

Naissances hors mariage

« Ces enfants nés “dans le péché” sont demeurés rares jusqu'à l'orée des années 1980. »



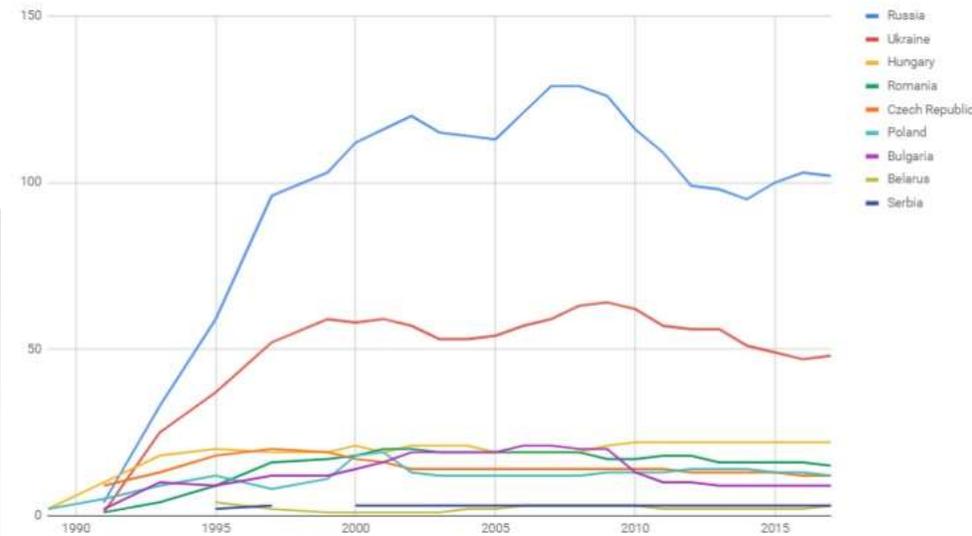
- Declining religiosity associated with societal changes across a range of indicators
- (“Le grand bouleversement - La déchristianisation s'accélère”, lepoint.fr, 28 February 2019)

from Europe's Young Adults and Religion, by Stephen Bullivant, professor of theology and sociology of religion at St Mary's University in London. Based on data from the European Social Survey 2014-16.

Conclusion

- Institutional policies have costs and tradeoffs
- Few are “all good” or “all bad”
- Risk of unintended consequences and negative externalities
- Institutional culture, history, and prior policy decisions impact the success of new policies
- “Constrained Optimum” is the best reasonably achievable under current circumstances
- How to identify potential “best practices” under varying circumstances while minimizing negative externalities and respecting ethical principles?

LDS Congregations in large nations of Eastern Europe, 1989-2017



Thank You!

