



Wilfred J. Hahn is senior partner with Hahn Investment Stewards & Company Inc., a global portfolio management firm. For more perspectives and resources on world economic and financial trends of interest to Christians, visit his website www.eternalvalue.com and subscribe to the free newsletter *Eternal Value Review: World Review and Market Monitor*.

Less Understanding in an Age of Knowledge



Many futurists today talk about an “age of knowledge.” This notion became very popular in the ‘90s as Wall Street and its cousins around the world fanned up a massive technology investment boom. Anything to do with information — information technology (IT), the Internet, computer software, intellectual property rights, patents, etc. — were (and remain) sought-after investments.

Popular opinion was captured by a new virtual world where thoughts and information would represent the fastest-growing area of wealth. The “information highway” concept was born. Knowledge is the future, said the seers, and having an occupation as a “knowledge worker” was the thing to do. Near the end of this craze, consultants and commentators were so ecstatic about the emerging information age that nothing seemed impossible. No factories or labor were necessary. Presidents and leaders of global organizations were preaching that the information and knowledge available through the World Wide Web would open up all mankind to

enlightenment and solve the poverty of many third-world countries. Simply by providing everyone access to the Internet, opportunity would be available to all of humanity — from the youngest school kids in America to the Bedouins of Arabia.

We now know that much of this talk was self-serving hype; however, new technologies and powerful information networks have indeed emerged that are radically changing the focus and mindset of the world. In fact, many of these new capabilities are surely facilitating significant endtime trends such as globalization and a world convergence in other key respects — ideologies of consumerism, humanism

and ecumenism. But has there really been a boom in knowledge? What does the Bible say? These are questions worth investigating.

And Knowledge Shall Increase

Studies show that information is definitely booming. The School for Information Systems and Management at the University of California, Berkeley, periodically produces a study that estimates the amount and growth of information in the world. Its most recent study, released in October 2003 to report findings for the end of 2002, estimates the quantity of information produced worldwide that year would amount to 30 feet of



The fastest-growing form of stored information is magnetic (discs, tapes, etc.), having grown 80 percent over the period reviewed. More than 90 percent of all new information is stored in various magnetic formats. No doubt, information is booming.

books for each person living on earth. This represents an increase of 30% in one year (a similar rate to that of previous years). At that pace, total information ever existing in the world doubles in less than three years.

How much data exists today? Researchers measure information in terms of “exabytes” — an electronic storage unit. To get a sense of the scale of this unit, consider that one typical typewritten page would amount to approximately 2,000 “bytes.” The number of bytes in one exabyte would require 18 zeros. This number is so large it is difficult to conceive. How big is an exabyte? According to the study’s estimate, all the words spoken by all human beings who ever lived would amount to 5 exabytes of information. Interestingly, for the three-year period surveyed by the above-mentioned report, total recorded information increased by 5.4 exabytes. In other words, it increased by more than all the words ever spoken in human history.

A few more facts from this landmark study will help to frame the scale of the current information explosion. Berkeley’s research group measures information stored in four ways: paper, film, magnetic (computer discs, hard drives ...etc.) or optical (a recent form of storage.)

- Information stored on paper is now the most insignificant of the three older technology formats, accounting for only one three-thousandth of all new recorded information. All the same, this form of information has grown approximately by a third between 1999 and 2002. Virtually all of this expansion has been in the category of office documents. Though some 300,000 new book titles were published around the world over this period, they only amounted to 3 percent of the information produced in office document form.

- Film accounts for a little more than 7 percent of all new information measured in digital terms. Photographs by far represent the largest component. Most of the rest of this category is in the form of visual media such as films and TV series. It would require 2,108 years to watch every movie ever made between 1870 and 2002. Consider then that a little more than one-quarter of all film content was produced between 2000 and 2002. (Who is watching all this new content?)

- The fastest-growing form of stored information is magnetic (discs, tapes, etc.), having grown 80 percent over the period reviewed. More than 90 percent of all new information

is stored in various magnetic formats.

No doubt, information is booming.

Knowledge and Wealth

Indeed, the world has been caught up in a KNOW economy (short for knowledge and wealth). The two are tightly intertwined in this day and age. Data management is a big industry today, taking many forms.

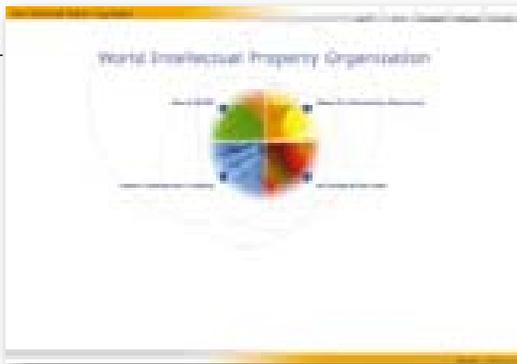
Knowledge from a commercial point of view is called “intellectual property” (IP). Amongst the biggest areas of IP are:

- media (television rights, ownership of movies, music rights, etc.);
- medicine (mainly drug patents but also genomes — for example, patents on human genes are a new growth area with more than 800 patents established, approximately three-fifths of them held in the US);
- agriculture (patents on biotech, plants, genetically modified foods, etc., again the majority of these held in the US; approximately two-thirds owned privately);
- and computer software.¹

In recent years, many of the battles on global trade policy have centered on the issue of intellectual property because knowledge is wealth. Patent ownership has increasingly

The World Intellectual Property Organization (WIPO) is now experiencing rapid growth, offering protection in more than 70 countries around the world. At the end of 2003, some 412,000 international trademark registrations were in force with this organization.

www.wipo.int



taken on a global dimension. The World Intellectual Property Organization (WIPO) is now experiencing rapid growth, offering protection in more than 70 countries around the world. At the end of 2003, some 412,000 international trademark registrations were in force with this organization. Among the biggest users of this system were pharmaceutical and electronic companies.

In view of the popular definitions of knowledge, various surveys rank the United States as the most “knowledge intensive.” According to the Knowledge Competitive Index² compiled by Robert Huggins Associates (a British-based consultancy) the United States possesses the world’s top 14 knowledge economies (regions).

Various commentators on world affairs talk of the “knowledge gap” between rich and poor countries. At a recent United Nations summit on the “information society,” solutions to close this gap were again cited as an important means to halving world poverty. A main solution to

this problem is simply to make more information available to the poor countries. Mostly, this means providing greater access to the Internet.

But do any of these statistics about trends and developments in information tell us anything about true knowledge? Where is the state of knowledge in the world today?

The Bible’s View on Knowledge

The Bible has the first and last word on knowledge: “The heavens declare the glory of God; the skies proclaim the work of his hands. Day after day they pour forth speech; night after night they display knowledge. There is no speech or language where their voice is not heard. Their voice goes out into all the earth, their words to the ends of the world” (Psalm 19:1–4).

Knowledge has always existed. It has never changed and finds its complete genesis in God and His physical creation. Knowledge of eternal significance concerns the knowledge of God and His purposes. The only thing that has changed is man’s understanding, and more importantly, mankind’s willingness to understand. And the Bible says that understanding begins with the recognition of God’s sovereignty and truth: “The fear of the

LORD is the beginning of knowledge, but fools despise wisdom and discipline” (Proverbs 1:7).

Scripture allows no excuse for lacking this type of knowledge. All of creation points to God: “For since the creation of the world God’s invisible qualities — his eternal power and divine nature — have been clearly seen, being understood from what has been made, so that men are without excuse” (Romans 1:20).

Here we clearly see that knowledge is the foundational information that matters for an eternity.

Prophecy: Words on Knowledge

Is an endtime boom in knowledge prophesied in the Bible? Some teachers suggest that the Bible prophesies a last-days increase in knowledge. Bible prophecy may indeed provide some insights on the phenomenon of an endtime information boom. However, as we will see, rather than prophesying a rise in knowledge, it is a boom in ignorance that will mark an endtime world. An increase in information — trivia, distractions and cares of this world — is definitely in alignment with last-day trends and developments. As we have reviewed, information — the vast preponderance of which is total trivia — has definitely boomed.



During the last days, the Jewish people will again come to an increasing understanding of their destiny and purpose. Finally, a remnant will come into a full understanding at the end of the Great Tribulation.

As mentioned, some scholars do interpret Scripture as predicting an endtime boom in knowledge. A popular proof text is found in Daniel 12:4: “But you, Daniel, close up and seal the words of the scroll until the time of the end. Many will go here and there to increase knowledge.”



Some also infer from this verse that not only will knowledge increase but it will also travel. For a number of reasons, it is not likely that this text refers to such phenomena at all. First, it would be difficult to conclude that this passage refers to more knowledge in the form of new revelation. Here the original word used for “knowledge” is more aptly defined as the “act of knowing.” In this sense, it is not knowledge that increases but rather the knowing of it. Also significant is that this statement is mentioned right after Daniel is instructed to “seal up the words.” As such, this would indicate that the explanation of the vision Daniel received is closed until such time that “knowing” would unlock its message. We are safer to interpret this passage as referring to an increase in understanding of historical prophecy and Scripture, not an increase of knowledge in its original sense.

Probably the most convincing argument is that since all of

Daniel’s prophecies are concerned with the Jewish people and their future, the statement applies purely to them. Just as the Scripture, “My people are destroyed from lack of knowledge,” (Hosea 4:6) is expressly spoken to the Jews, so is Daniel’s prophecy of an increase of knowledge only applied to the Jews. The word “knowledge” here does not refer to technical and scientific information but rather to the knowing of God’s plan and His laws. The prophets often castigated the Hebrews for their lack of knowledge. “Israel’s watchmen are blind, they all lack knowledge [...]” said Isaiah (Isaiah 56:10). Hosea confirmed that the knowledge being lacked referred to ignorance of God and His Laws. “Because you have rejected knowledge, I also reject you as my priests; because you have ignored the law of your God, I also will ignore your children (Hosea 4:6).

During the last days, the Jewish people will again come to an

increasing understanding of their destiny and purpose. Finally, a remnant will come into a full understanding at the end of the Great Tribulation: “Then I will give you shepherds after my own heart, who will lead you with knowledge and understanding. In those days, when your numbers have increased greatly in

the land, declares the LORD” (Jeremiah 3:15-16).

Today’s technology and science boom certainly provide evidence of increased understanding (and in that sense a body of human knowledge). However, this phenomenon would not qualify as the meaning of the prophecy of increased knowledge. If anything, the Bible much more clearly talks about increasing ignorance and the forsaking of knowledge.

Points to Ponder

Information is flooding the world — technology, entertainment and media, communications networks, etc. Only a small fraction represents true knowledge, the knowing of God’s cosmic plans. Most of it is total trivia. Information, of course, has its uses — both good and bad. Quoting an observation on this point, “Every increase in knowledge [information] may possibly render depravity more depraved, as well as it may in-



When this cosmos finally wraps up and humanity sits in front of the Judgment Seat, there will be no excuse for the world not to have recognized the signs of the times ... the season of Christ's soon-coming return.

crease the strength of virtue. It is in itself only power; and its value depends on its application."³ More information simply increases the power for good or bad.

If anything, today's information boom is an assault upon knowledge — a distraction to its recognition and understanding. This aspect aligns with Bible prophecy that applies to the entire world. Scripture clearly indicates that in the last days people will be taken up with the cares and anxieties of the world and its things (2 Timothy 3:1–5, James 5:1–5). This clearly is a distracted world far from knowing and fearing God.

Despite this mind-jamming and diversionary onslaught, true knowledge is there for the knowing by anyone. We are given the ability to discern and to acknowledge it and to willingly respond. The Bible calls this ability prudence and wisdom. It is given to both Jews and Gentiles, and is operative in both the Old and New Covenants.

The truths of eternity and God's plan for the cosmos and salvation remain secure. God preserves knowledge ... it does not change. "The eyes of the LORD keep watch over knowledge, but he frustrates the words of the unfaithful" (Proverbs 22:12).

Another prophetic aspect of today's information explosion

speaks to those of us who are living in the Western world. Information is expanding and more accessible than ever in these last days. Even though we live in an age of institutionalized corruption and deception, anyone who wishes to pursue truth can do so as perhaps never before. Key, crucial facts are all found in the public domain today — a surprising amount available free over the Internet from even the most remote parts of the earth. When this cosmos finally wraps up and humanity sits in front of the Judgment Seat, there will be no excuse for the world not to have recognized the signs of the times ... the season of Christ's soon-coming return. There won't be any clemency offered to the pleas of involuntary delusion, blindness, misinformation, or organized agendas of deception. The information will have been available all around. There will be no excuse for not being able to recognize the season of Christ's soon-coming return.

Its interpretation is unlocked by the messages and warnings found in God's informational database: the Bible. This information has also been more available than ever before — ignoring some of its corrupted versions — and its Gospels more broadly accessible to the average person.

After all, the world's population has more literacy skills than ever and the Bible is more available in more forms (electronic text, recordings, printed, etc.) than ever. Moreover, understanding the most important truths of the Bible doesn't require theological training, mysticism, allegorizing, ordination, an ecclesiastic intermediary, secret revelation or knowledge of what certain theologians or early Church Fathers may have said. The Bible says what it says and God knows how to say what He means: "you do not need anyone to teach you" other than the Holy Spirit (1 John 2:27). If it were otherwise, the very character of God would be in question.

The Psalmist prayed: "Do good to your servant according to your word, O LORD. Teach me knowledge and good judgment, for I believe in your commands" (Psalm 119:65–66).

May we increase in knowing and understanding these very last days. (MC)

ENDNOTES

- 1 *Wired* magazine, "The Free and the Unfree," June 2004.
- 2 *The Financial Times*, "US ranks highest in knowledge economies' index." April 13, 2004.
- 3 Sydney Smith.