

**Chapter 1 : Practical Considerations - Center for Innovation in Research and Teaching**

*Some Practical Considerations for Monetary Policy Frameworks A speech delivered on March 9, , before the Manhattan Institute Shadow Open Market Committee in New York City. Introduction.*

The Holy Father has also directed him to observe a life of prayer and penance in seclusion until the completion of the canonical process. At the same time, he is not to present himself nor function in any way as a cleric. Understandably, many are frustrated, upset, and angry. I share all these same emotions. I was barely ten years ordained when the clergy abuse crisis surfaced in the Church in the United States in It was and remains a very painful time for all the members of the Church, especially those impacted by abuse. In many ways, it is a moment which has not yet concluded. Since then, both as a priest and now as a bishop, I have met personally with those who have been abused. We must continue to do all we can as Church to accompany those who have been abused. At the same time, this new revelation of Archbishop McCarrick, many people “ priests, laity, and hierarchy ” are wondering how this or any bishop might rise to the rank of the episcopacy let alone to become a cardinal in the Church? How could such misbehavior not be known and addressed, let alone be overlooked to allow any priest to become a bishop, archbishop or cardinal? Indeed, the Body of Christ is hurting. I believe it is accurate to say that most regular, church-attending Catholics still trust their priests, who minister and serve the People of God faithfully. The same can no longer be said of bishops. We have lost the trust of many of our priests and people, and we must act wisely in the face of this present challenge in the hopes of regaining that trust. By Church law, bishops as successors to the Apostles enjoy an autonomy in the exercise of their office. Because review of accusations of sexual misconduct by bishops as well as their failure to properly address sexual misconduct of priests and church personnel belongs solely to the Holy See, it is not possible for any one bishop nor even the United States Conference of Catholic Bishops USCCB to answer all the many difficult questions being asked these days regarding the issues of accountability and transparency. However, there are some practical considerations that we can advance for further study and review, such as the following: Because Pope Francis places such importance on synodality, especially in terms of an enhanced role and voice of episcopal conferences, the USCCB should speak through our officers on behalf of the Church in the United States for a review of the process by which Archbishop McCarrick rose through the ranks of the hierarchy to the College of Cardinals. We should respectfully ask to define additional measures to strengthen the integrity and process by which new bishops and members of the College of Cardinals are chosen. Bishops must continue to be held accountable for the way we handle the accusations of misconduct against any Church employee “ not just priests. The USCCB did not go far enough in the Dallas Charter by not holding cardinals and bishops accountable to the same standards as priests and deacons who are accused of sexual misconduct with minors. This requires a prompt and firm correction. The USCCB should immediately convene an ad hoc committee of the most respected leaders of our Conference “ no more than seven 7 “ to write a protocol to be placed before the body of bishops for review and approval as soon as possible. Part of this protocol would require the development of a National Review Board for accusations of sexual misconduct against bishops. The membership of this body would include the seven bishop members of the ad hoc committee, the Papal Representative to the United States as an ex officio member, and an equal number of lay representatives. This Review Board would examine all accusations against bishops and make their decisions and recommendations to the Holy See. As a means of clear transparency, this Review Board would make its recommendations public within 60 days of submission to the Holy See if no public action or response has been taken by the competent authority. Finally, in addition to strengthening the process for reviewing accusations against bishops, this present moment is a call to all the members of the Church to renew our pursuit of holiness, and the call to daily conversion which, as the baptized, all of us share. At its core, we are facing a spiritual crisis, and these times call us to renew our life in and our witness to Jesus Christ. While bishops are called to govern effectively, we have an even greater responsibility to lead holy lives, and to help our brothers and sisters entrusted to our pastoral care to do the same. Likewise, all the members of the Church, laity, priests, deacons and bishops, must look to the Chief Shepherd, Jesus Christ: Peter gives sound advice to us all

in the following passage 1 Peter 5: So I exhort the presbyters among you, as a fellow presbyter and witness to the sufferings of Christ and one who has a share in the glory to be revealed. Tend the flock of God in your midst, [overseeing] not by constraint but willingly, as God would have it, not for shameful profit but eagerly. Do not lord it over those assigned to you, but be examples to the flock. And when the chief Shepherd is revealed, you will receive the unfading crown of glory. Likewise, you younger members, be subject to the presbyters. And all of you, clothe yourselves with humility in your dealings with one another, for: Cast all your worries upon him because he cares for you. This is not a moment to bury our heads in the sand, but rather a Kairos – a time appointed by God – to acknowledge the grave and pressing responsibility that now lies before us. Let us take up the challenge with courage and hope. Let us bring relief, healing and a renewed sense of confidence to this suffering Body of Christ, the Church, in a spirit of sound governance, concerted prayer, true humility and the love of a good shepherd.

**Chapter 2 : Some Practical Considerations for Monetary Policy Frameworks - Federal Reserve Bank of Ch**

*Practical considerations in case study research: the relationship between methodology and research. - This site specifically discusses the particular challenges and issues to consider when using case study research methods.*

The tips given in this article may simplify your next project. Do you work with toroidal inductors and transformers? Are you confused about some of the practical aspects that relate to these useful devices? Numerous articles concerning toroidal coils and transformers have appeared in QST over the years, and The ARRL Handbook includes a section on the application of toroids. But some of the application methods are not highlighted in the average text that treats these devices. This article focuses on the day-to-day questions that I receive about toroids and how to use them. A Short Review of Toroid Advantages Why should we use toroids in place of air-core or slug-tuned coil forms? Foremost of the reasons is cost, at least for experimenters. Small toroid cores are less expensive than good quality ceramic coil forms - especially those that contain adjustable powdered-iron or ferrite slugs. Toroids have an inherent self-shielding property. Specifically, the field from a toroidal inductor is pretty much self-contained. This means that radiation from the coil or transformer is minimal compared to a solenoidal coil that has an air or slug core. No metal shield can or shield compartment is needed to prevent a toroidal coil from causing stray coupling to adjacent coils or components. A tuned circuit that contains a toroidal coil will generally have a high Q quality factor, if the correct core material is chosen. Some multilayer slug-tuned coils have relatively low Q factors or less. Broadband transformers are made easily when we use magnetic cores, with ferrite being the most common of the cores for this purpose. Equivalent performance over a wide range of frequency is not possible when we use air-core inductors for the windings. Finally, toroids are usually more compact than their conventional equivalents. This helps us to design and build miniature amateur equipment. Powdered-iron cores are less prone to saturation at a particular power level heating and changes in core permeability than are ferrite cores of equivalent size cross-sectional area. Unfortunately, a same-size powdered-iron core compared to a ferrite one has substantially less permeability. This means that considerably more turns are needed for a given inductance when we use powdered iron. Too large a number of turns can spoil the performance of a broadband transformer. It is for this reason that ferrite rods and toroids are found in most balun and other broadband RF transformers. The catalog from Amidon Associates, Inc contains tables that specify the frequency limits for both types of core material. The Q-versus-frequency listings are for narrow-band tuned circuits. Smaller and larger toroid cores are available. Those listed are the most popular sizes among radio amateurs. The powdered-iron cores are manufactured by Micrometals Corp, and the ferrite ones are produced by Fair-Rite Corp. Permeabilities for all of these cores are listed in the Amidon Associates catalog. The power ratings given in Table 1 are for low-impedance harmonic filters and broadband transformers, and do not apply to narrow-band tuned circuits. Greater power limits may be possible under some conditions. The high RF voltage associated with tuned high-impedance resonators reduces the maximum ratings in watts per given core size. The power ratings of magnetic cores are based on ac and dc voltage in the windings, the number of coil turns, and on other factors. The Q ratings in Table 1 are for optimum Q versus operating frequency. Acceptable performance is available above and below the listed frequencies see Amidon Associates charts. You may use any of the toroids in Table 1 at frequencies below the optimum Q notations. You should be aware also that the higher the recommended operating frequency, the lower the core permeability. Most broadband transformers for the MF and HF spectrum are wound on no. Some broadband transformers for HF are wound on no. The larger the core, irrespective of the permeability, the fewer turns needed for a specified inductance. Cores may be stacked atop one another to increase the effective cross-sectional area. This permits fewer turns and greater power-handling capability. You may use epoxy cement to affix the cores to one another. Table 1 - Guide to selection of cores for narrow-band tuned circuits Amidon Core no.

**Chapter 3 : The Body of Christ is Hurting: Some Practical Considerations – Reflecting the Good News of**

*Most of you have heard about the recent news of one of our US Cardinals, Theodore McCarrick being removed from public ministry following a credible, substantiated accusation that he sexually abused a minor as a priest, and a subsequent allegation that he had abused another child for nearly two decades.*

A well-run convention provides a great many things beyond a location. Obviously, programming is a huge concern. I touched on this in another post , but just knowing how many of what kinds of sessions you want to provide is just the beginning. Here are some example questions that need answering: How will we locate good people to run those sessions? How will we fill sessions for which we are having trouble locating people? Will speakers, facilitators, etc. Will we pay travel expenses for some of those people? How do we determine what sessions go into what event spaces? Obviously, there are a lot more questions, but those are some of the highlights. Another issue to consider is vendors. It is not unusual for conferences to have vendors, who may or may not pay for the space they occupy. While Hearthingstone is primarily a conference about religious issues, many traditions do not separate commercial activities from the sacred. Furthermore, a large number of polytheist leaders support themselves or substantially supplement meager incomes through vending. However, offering a dedicated vendor space with rented tables presents liability concerns, such as the provision of security and the need to carry additional insurance. I know of some conventions that fell down in this regard, and it was not pretty. Speaking of meager incomes, it is not unusual for conventions to have a hospitality suite that provides light refreshments to any attendee free of charge. Based on past experience, we should expect that at least a few attendees will be in need of more substantial food. While Austin has ample supermarkets and restaurants, some of them operating 24 hours a day, not every attendee will have the means to make use of them. In addition to food, many of our traditions involve the offering of alcohol, tobacco, and the like. One of the important ways of communicating this, and other important information is the convention program book. There are a great many questions to answer around this publication. For instance- what paper size do we print it on? Smaller books are more portable and easier to lose, while larger books are easier to read but less easy to carry around and are generally more expensive. Since Hearthingstone is partly about networking, it might make sense to print a small contact blurb for each pre-registered attendee unless they opt out. We could put these online instead, but building a way to show it only to registered attendees could be tricky. Do we put the book online? We will need a way of balancing the educational benefits of recording sessions and sharing them afterward with the need to allow some folks to opt out of appearing in public. The same applies to any press releases or other media attention we eventually decide is appropriate for the conference- how do we raise the profile of polytheisms generally while protecting attendees whose identities need to remain private? Lots to think aboutâ€.

**Chapter 4 : Reference intervals (2) - some practical considerations**

*KEY POINTS. Therapy should be considered in all aging hypertensive patients, even the very elderly (> 80 years old). Most antihypertensive drugs can be used as first-line treatment in the absence of a compelling indication for a specific class, with the possible exception of alpha-blockers and beta-blockers.*

These ponds range in size from less than one acre to over 30 acres in size. Unfortunately, many of these ponds are so poorly constructed that they fail to serve the purpose for which they were originally designed; some may be unsafe. Until recently, little concern was shown for construction safety in building farm pond dams. Now, however, many states are routinely checking pond dams, and condemning those which are unsafe. Condemned ponds must be drained and repaired or destroyed. Therefore, it is important to properly construct new ponds in order to prevent expensive condemnation or structural failure of the dam. Farm ponds are constructed for many purposes. Those designed for livestock watering, irrigation, and fire protection must be built near the use they serve and also contain adequate water. Ponds used for flood and erosion control frequently are located in dry valleys or depressions and have the capability for the storage of large quantities of water, especially during heavy rainfall and spring floods. Ponds constructed for fish and wildlife production or recreation are designed and constructed for 1 easy access, 2 adequate volume and, 3 water level manipulation. Farm ponds can be designed and built to serve multiple purposes with advanced planning. This article is designed to provide basic information needed to design and construct a multiple-use farm pond in Virginia.

**Kinds of Ponds** There are two basic types of ponds: Embankment ponds, built by placing the dam across a stream, are not recommended because they frequently wash-out. Excavated ponds are made by digging either the pond itself or the surrounding area to form levees. Ponds of this type are recommended and easily constructed, particularly in areas of flat topography. Selecting the Pond Site Selection of the pond site is one of the most important steps in construction. A good pond site contains 1 Level topography that provides for economical construction, 2 soil with sufficient clay to hold water and 3 an adequate water supply. Before making the final site selection, one should examine all potential sites considering economics, accessibility and safety. Economically speaking, construct a pond that provides the largest volume of water with the least amount of landfill. Liability is a final consideration. For example, what would happen if the dam failed causing loss of life or injury? The pond owner is normally held liable for downstream flooding and related damages caused by dam failure. Level topography will minimize the need for costly soil removal. In most instances, the maximum height of a dam should be 20 to 25 feet. Dams higher than this are expensive to build and frequently stratify in summer resulting in deep water areas unsuitable for aquatic life. Dams in Virginia should be high enough to provide a minimum depth of six feet year-round. Otherwise, dams must be high enough to compensate for continuous evaporation and seepage. Because a pond is simply a depression for holding water, the dam and bottom must be composed of soil which minimizes seepage. Clay soils are best for lining ponds because they minimize leakage. Sites containing gravel or sandy soils are unsuitable, often requiring costly earth moving. Limestone or shale areas are unsuitable because of possible fractures which create leaks. Swampy areas are poor sites because they are difficult to drain and costly to maintain.

**Water Supply** The water supply must be sufficient to rapidly fill the pond and maintain a relatively constant water level-one that does not fluctuate greatly throughout the year. Ponds with large overflows of water flush essential nutrients and allow fish to escape. Small streams are satisfactory sources of water for most ponds if 1 the flow is sufficient to fill the pond and maintain the water level, 2 the stream is not subject to flooding, 3 the watershed is well vegetated, and 4 the stream carries a little silt load, especially during flood periods. When streams are used as a water supply, a wise precaution is to build the pond adjacent to the stream not dam the stream and have an inlet pipe which can be screened or closed as needed. This provides control over siltation and nuisance fish migration. Another common water source for farm ponds is surface run-off waters which seep across the surface after rains. In Virginia, pond owners need about 3 acres of land for each acre-foot of pond a surface acre foot of water one foot deep , except where sandy soils exist or rainfall is variable. In these situations, expert advice from professional engineers is required for predicting available water supplies.

Springs, wells, and ground water provide the best sources of pond water. Ground water usually is of the best quality to support aquatic life. Some well water contains excessive carbon dioxide or nitrogen and must be aerated before being suitable. Some ground water may also contain excess minerals which are harmful to fish and other aquatic life. All waters should be analyzed before pond construction to assure that they are harmless to aquatic life. Pond Construction Before construction, the pond owner should estimate the amount of fill for the dam and determine the cost for moving the dirt. Cost of drain pipe installation, spillway construction, clearing the pond area, and other items should be considered. Once a decision is made to construct the pond, the site should be cleared of all trees and brush. The dam-site area should be marked with toe and grade stakes, all topsoil removed and a core trench excavated. Once the core trench has been filled with high quality clay soil, a drain pipe with anti-seep collars should be installed. Many types of drains are available. The one you choose depends on the costs, availability and suitability. The drain should be of sufficient size to drain the pond in a 3 to 7 day period. Filling the exposed portion of the dam is the most expensive operation in pond construction. All fill should be composed of high quality clay soil applied in thin, well-packed layers. When completed the dam should have a 2:1 slope. The top of the dam should be 12 feet in width to allow vehicle traffic and prevent muskrats from burrowing through the dam Figure 1. Spillway Construction Inadequate spillway capacity is the main cause of earthen dam failure. All dams require this protection which can be provided by one or several emergency spillways of sufficient size. The spillway should be adequate to release flood waters and minimize flows to less than one foot above the spillway. This reduces loss of valuable sportfish and structural damage. Spillway size should be related to the drainage area. Recommended spillway size can be calculated by adding 15 feet to one-half of the total drainage area acres. For example, a acre drainage area should have 40 feet of spillway, 2 acres requires 65 feet of spillway, and 3 acres requires 80 feet of spillway. Other Construction Features The pond dam should be grassed immediately after construction to prevent erosion. A permanent species of grass, suitable for your local area, should be used. A quality grass, properly fertilized, will quickly cover to prevent erosion and weed growth and will be easy to maintain. The pond bank should have a 2:1 slope. Irregular shaped ponds non-circular increase angler access Figure 2. All pond edges and piers should be sodded with a suitable permanent species of grass. The pondside face of the dam can be protected from wind and wave action by riprapping the face of the dam with rock. Riprap should extend several feet below the low anticipated water level. Livestock should be excluded from ponds by fencing, A gravity-flow watering trough can be installed below the dam for livestock water. Pond inlets should be constructed so that inflows can be controlled and filtered. The filter prevents unwanted fish species from entering the pond Figure 3 , and a good outlet design prevents fish loss Figure 4. In drainage areas that contain silt or heavy loads of toxic chemicals, the surface runoff waters should be diverted via a ditch around the pond. Diversion ditches prevent excess turbidity, siltation, fertility and fish kills. Inspect and repair your pond periodically. Fill gullies, replant grass, and riprap as needed. Mow pond edges to prevent woody plant growth and promote easy access. Advice in planning and constructing ponds may be obtained from either the Soil Conservation Service or from Virginia Cooperative Extension. Additional literature on this subject is available from these agencies. Reviewed by Michelle Davis, Research Associate, Fisheries and Wildlife Virginia Cooperative Extension materials are available for public use, reprint, or citation without further permission, provided the use includes credit to the author and to Virginia Cooperative Extension, Virginia Tech, and Virginia State University. Department of Agriculture cooperating.

*Spillway Construction. Inadequate spillway capacity is the main cause of earthen dam failure. All dams require this protection which can be provided by one or several emergency spillways of sufficient size.*

Practical Considerations Practical Considerations This module will discuss issues and potential problems that should be considered when planning a research project. Learning Objectives To create a list of questions that may assist in identifying practical considerations for a research project. To identify potential problems and issues relating to a particular research project. When planning a research project, there are numerous issues and guidelines to consider. Regardless of the size, scope, or topic of the research project, it is important to consider potential issues relating to the project prior to finalizing the research plan. These issues may relate to the feasibility of the research, funding, resources, methodology, data analysis, and ethical concerns just to name a few. Following is a list of questions that may assist in recognizing potential problems: What is the timeline of the project? Can the objectives of the project be realistically completed within this timeline? What are the financial resources that will be necessary for this project and are all expenses accounted for in the project budget? Are the objectives achievable within the budget? What are the potential sources of funding? Does the timeline for funding correspond with the timeline for completion of the project? Is the appropriate personnel available for collecting, processing, and analyzing data? Does the research need any ethical approval, such as IRB? Will the methodology chosen produce the right type of data to meet the project objectives? Does the methodology control for potential biases? Is there a potential audience that may be interested in the results? Will the results contribute the field of study in a meaningful way? These are just some examples of the types of issues that researchers should consider while planning a project. Advance consideration of these questions will result in a project that is more likely to be completed on time with sufficient resources and reliable results. Many of these of these issues should be considered when initially selecting the topic of the research problem. The following video discusses this in further detail. Routines and other recurring action patterns of organizations: Industrial and Corporate Change, 53, Issues, Methods and Research. Evidence-based practices in classroom management: Considerations for research to practice. Education and Treatment of Children, 313, Research issues and ideas in statistical process control. Journal of Quality Technology, 314.

**Chapter 6 : Toroids - Some practical considerations**

*Practical considerations of wildlife monitoring Wildlife Research station, which had only one set of tracks (Alien et al. ). On the other hand, we typically find more sets of tracks (or.*

For some of the analytes magnesium, TSH and APPT a certain amount of the observed variation in reference intervals between laboratories could be accounted for by differences in analytical methodology, but it certainly did not account for all of the variation. Despite the author-acknowledged limitations of this self-reporting study, it provides the best available evidence surrounding reference interval policy and practice in the generality of hospital laboratories and suggests that in some laboratories - albeit a small minority - inaccurate reference intervals may be being used to interpret patient test results. How then can laboratories ensure that the reference intervals they adopt are fit for purpose? Two far simpler approaches are proposed: Aspects to be considered include: The laboratory has an acceptable reference interval for the old method and needs to know if that reference interval is applicable to the new method. The guideline for transferring reference intervals is based on the notion that the two most important variables that influence a reference interval are the method of analysis and the population from which the reference individual samples are taken. Since the test population is unchanged in the scenario outlined above, the only consideration for transference of the reference interval is comparability of the two analytical methodologies. When implementing a new method, it is normal laboratory practice to perform a method comparison study in which the same fresh patient samples are measured by both methods. If the study shows that the two assays are completely comparable across the measuring range good correlation and no bias, then the reference interval can be adopted unchanged. Alternatively, if the study shows good correlation but a proportional negative or positive bias between the two methods, it may be acceptable to use the regression equation generated by the study to "correct" the reference interval to take account of this systematic bias. The guidelines provide the following example of the way this is applied: The results of a comparison study of methods  $x$  old method and  $y$  new method to be adopted across a concentration range of give the best-fit linear regression line: Since there is excellent correlation but proportional bias between the two methods, the "corrected" reference interval for method  $y$  can be calculated thus: Essentially it is acceptable to simply transfer an existing reference interval so long as the population being tested is the same, preanalytical procedures are unchanged and comparability of the two methods has been demonstrated by an acceptably conducted method comparison study. A minimum of 40 patient samples should be tested and they should be selected so that full concentration range in health and disease is represented. The obvious advantage of the transferring protocol is that it does not require analysis of samples from reference individuals. However, it has limited application because it only applies if the reference interval in question has been in use at that particular institution. Furthermore, a level of judgment is required to make the decision about whether or not the two methods agree sufficiently for them to share the same reference interval. In cases where there is some doubt, the guidelines suggest that validation of the reference interval is indicated. The preanalytical protocol used in the adopting laboratory for processing patient samples should not be significantly different from that used for determining reference values when establishing the reference interval. The validation study is designed to confirm that the established reference interval is appropriate for the population served by the adopting laboratory. The exclusion criteria used to select these individuals should reflect those originally used in selection of reference individuals for the establishment of the reference interval. The test results from the reference individuals are first examined for the presence of outliers.  $R$  where  $D$  is the absolute difference between the most extreme value of a data set  $i$ . If  $D$  is equal to or greater than one third of the range  $R$ , then the most extreme value is an outlier. Any outliers identified must be eliminated and replacement samples obtained, so that a statistically homogeneous group of at least 20 reference values are available for comparison with the established reference interval. If three or more values fall outside the reference interval, the whole procedure should be repeated with samples from a different set of 20 reference individuals. As before, if no more than two of 20 reference values fall outside the reference interval, it is appropriate for the laboratory to adopt the reference interval. However, if once again three or more values fall outside the reference interval, it

is an indication that the population served by the laboratory differs significantly from that used to prepare the reference interval, and it might therefore be inappropriate to adopt the reference interval. If after full investigation and further validation study the problem remains unresolved, guidelines suggest that the laboratory should consider establishing its own reference interval. SUMMARY The topic of reference intervals seemed for many years to be the sole preserve of an expert clique s within the laboratory community, and the generality of clinical laboratory staff, whilst appreciating its importance, viewed it as a rather arcane subject, perhaps best left to the experts. Regulatory authorities now demand that more laboratory staff engage with the topic in a proactive way. It is no longer acceptable laboratory practice, if indeed it ever was, to simply adopt a published reference interval without careful consideration due diligence in modern, post-credit crunch, parlance. These two articles were intended to introduce the topic of reference intervals to those laboratory staff and other interested parties who have no particular knowledge of, or expertise in the field. This second article highlights the lack of conformity surrounding reference interval policy and describes an expert-devised approach to the validation of reference intervals that could be applied in all laboratories, no matter what their level of resource. An introduction to reference intervals 1 - some theoretical considerations. Defining, establishing and verifying reference intervals in the clinical laboratory. International Organization for Standardization. The origin of reference intervals. Arch Pathol Lab Med ; Quality assurance measurements in departments of pathology and laboratory medicine. Processing data for outliers. Influence of statistical method used on the resulting estimate of normal range. Clin Chem ;

*Practical Considerations When considering executing a document by electronic signature, the following points are worth noting: Is the document governed by a law other than Jersey law?*

The SOMC is a distinguished and knowledgeable group that encourages public discourse on important issues related to monetary policy. I became president of the Federal Reserve Bank of Chicago in September , just a few months before the business cycle peak. The subsequent story line is familiar to all of you. The National Bureau of Economic Research NBER dated the beginning of the recession as December , and by the fall of , we were dealing with the largest financial crisis since the Great Depression. These difficult times required extraordinary monetary policy responses. The Fed established emergency lending facilities to support financial market functioning. Thereafter, providing further accommodation required turning to nonconventional policy tools: These policies were effective. And, today, the fundamentals for the U. By most assessments, the U. While the attainment of sustainable 2 percent inflation has taken longer, it now appears closer. Since December , the FOMC has raised the federal funds rate to a range of to basis points, and the Committee is in the process of a slow, steady renormalization of the balance sheet. If we are lucky, the future economic and financial climate will more closely resemble the pre-Great Recession experience if not exactly a Great Moderation economy. Such a relatively benign environment hopefully would allow changes in the federal funds rate target alone to provide adequate monetary accommodation when needed. But, for a host of reasons, it is all too likely that policymakers will face more difficult monetary policy challenges when the next downturn occurs. Summary of three messages Before I go further, let me state the three messages I want to develop this afternoon. First, most alternative monetary policy frameworks that have been discussed exhibit two pretty clear characteristics: During meaningful economic downturns they likely will generate periods of aggressive monetary accommodation with short-term policy rates at the effective lower bound; and they also likely will require an extended period of inflation above 2 percent—and perhaps substantially so for some time. These features are obvious to everyone in this room. And they beg the question: How will these policies be communicated to the public and how will the public view these outcomes? Policymakers need to plan for this. Second, in selecting and designing any particular alternative framework, what will be the roles of financial competition and regulatory policies and what will be the implications for market functioning? These alternative frameworks will likely feature long periods of low or negative real interest rates and the use of instruments such as large-scale asset purchases. Will these policies induce behavior that requires enhanced regulation in order to mitigate financial instability risks? Or, for each framework, are markets inherently self-equilibrating such that market discipline alone will be sufficient? The ultimate effectiveness of any strategy will depend on the answers to these questions. So policymakers will need to address the financial stability implications for each suggested alternative. Third, even if nothing much comes of these discussions and no dramatic changes are made to our monetary policy framework, there are opportunities to improve our existing strategy. Namely, I think additional communications enhancements are needed to bolster the credibility that the FOMC will deliver on its policy mandates. We should concentrate more explicitly and more publicly on outcome-based policy settings aimed at delivering maximum employment and 2 percent inflation on average through the cycle. Better communicating such an outcome-based approach is a more useful enhancement for bolstering credibility than strict adherence to instrument-based policy rules—a prescription that theoretical analysis often relies on to deliver monetary credibility. Of course, such an outcome-based emphasis would also be beneficial for executing any of the alternative policies under consideration. To address these issues, I think context and historical perspective are critically important. I distinctly remember Ben saying that much of economics comes down to two simple propositions: This was formally stated in the Bernanke era as a long-run strategy for monetary policy statement announced in January . Any changes that might be made to our policy framework must be faithful to this overarching strategy of doing our best to satisfy our dual mandate objectives. Of course, the immediate impetus for thinking about alternative monetary frameworks is the zero lower bound ZLB and the extraordinary monetary efforts taken

during the Great Recession and its aftermath. Five hundred basis points of easing ought to be enough to provide substantial financial support to the economy while avoiding the ZLB and maintaining an upward-sloping yield curve with vibrant credit intermediation to facilitate the business needs of Main Street. But today we live in a world where, for well-known reasons, the long-run equilibrium real federal funds rate might optimistically be 1 percent, but it is perhaps lower. Adding in our 2 percent inflation target leaves the long-run nominal rate at 3 percent or lower. That falls well short of that basis-point buffer that Federal Reserve policymakers have needed in the past. A number of alternative monetary policy frameworks that could provide additional accommodation have been proposed: An explicitly higher inflation target—say, 4 percent; nominal gross domestic product GDP targeting; temporary, state-contingent price-level targeting; and unconditional price-level targeting PLT. It is not my intention today to offer any endorsements or critiques of these proposals. As I emphasized previously, I would like to highlight some of the important issues that will likely inform us about the strengths and weaknesses of the various frameworks. Alternative frameworks and their implications for inflation

Let me turn now more directly to the subject of alternative frameworks and their implications for inflation. These alternative frameworks often allow for a higher inflation rate—either permanently, with a higher inflation target, or temporarily, as policymakers close price-level or nominal-GDP gaps that opened up during protracted periods of below-target performance. Traditional monetary theory often focused on the shoe-leather transactions costs associated with high steady-state inflation—*notably*, those incurred in minimizing holding non-interest-bearing money. Later discussions included menu costs, relative price distortions arising from sticky prices, and interactions between the tax code and inflation. I would think such costs are lower today than, say, in the s, when Cagan wrote about money demand and provided foundations for assessing these costs. Interest-bearing transactions accounts, other financial innovations, e-commerce, and partial indexation of the tax code likely reduced these costs substantially. High inflation variability presents a different set of costs. A common argument for lower inflation objectives is that high average levels of inflation are associated with more variable inflation and that such variability generates real costs for the private sector. As Herbert Stein said in my undergraduate macro seminar in , the way a country like Israel got to 60 percent inflation was not by starting at 10 percent and increasing it by 10 percentage points each year. It instead followed an extremely volatile path with inflation going from 5 percent to 8, 15, 30, 60, and eventually above percent by —but that was after I graduated from the University of Virginia in ! The risk of this type of out-of-control inflation acceleration and volatility is clear for dysfunctional monetary regimes. And it certainly is very costly. But I am not aware of a theory that delivers such outcomes without the additional fuel of aberrant central banks pursuing objectives other than a stable inflation objective—for instance, if monetary policy were to be subjugated to supporting unsustainable fiscal conditions. These are general concepts. What about a specific number for the inflation target? Many monetary economists start their thinking with the Friedman rule, which says that to compensate for the opportunity cost of holding money, the optimal inflation rate is negative and equal in absolute value to the risk-free interest rate. Others have argued that zero is the appropriate natural focal point. Alan Greenspan offered up another way to think about price stability: Central banks around the world have largely settled on 2 percent as an inflation target. I guess it is tempting to think that this consensus must mean that 2 percent is the right answer. But it is useful to explain why 2 percent PCE inflation might be the right answer. When the Federal Reserve started discussing an explicit inflation target in the s, it certainly recognized that many factors play a role in determining the best inflation objective. For example, there is the interplay between sticky wages and productivity. As highlighted by Akerlof, Dickens, and Perry , downwardly rigid nominal wages can throw sand in the gears of labor markets and boost unemployment. The basis for trend nominal wage growth is the productivity trend plus long-run inflation, which should equal the inflation target. Accordingly, higher productivity growth—such as we experienced in the late s and early s—can support lower inflation objectives while maintaining nominal wage trends that are high enough to support adequately flexible real wages without undue reliance on a large percentage of nominal wage cuts in order to equilibrate labor markets. Of course, another key consideration in target choice is how often our monetary policy framework might encounter the zero lower bound. Clearly, these ZLB odds would be less under 3 or 4 percent inflation. So a higher inflation objective should be included

in any complete list of possible alternative frameworks. The other frameworks under consideration also would include potentially protracted periods of inflation above 2 percent. Closing an underrun of a price-level target necessitates producing higher inflation for a time; and closing a big gap would require a major inflation episode. But how do we know such policies will be acceptable to the public? Here, we have to return to the costs of inflation rates and variability that I just ran through. There are a lot of questions to ask: How much of other perceived costs of higher inflation rest on aversion to nominal wage cuts or other issues regarding the differences between real and nominal variables? With regard to pursuing a moderately higher inflation objective, is higher variability preordained, even if only temporarily in the level-targeting regimes? Or is our monetary policymaking apparatus robust and credible enough to deliver low variability over a range of inflation objectives? Could the central bank successfully communicate the benefits of less protracted and shallower cyclical shortfalls in employment and economic activity that might accompany a higher inflation policy that avoids the zero lower bound? And if it could, how would the public weigh them against the perceived costs of inflation? The bottom line is that the acceptability of 2 percent versus a higher inflation objective—even temporarily—probably comes down to 1 how well various innovations and indexing have reduced the costs of inflation; 2 perceptions about real and nominal variables; and 3 the ability of central banks to consistently implement policy so that inflation variability is relatively contained at different inflation targets. Of course, a related set of issues would arise following a protracted period of overshooting a level target. Would the public support the monetary restraint required to deflate a large positive nominal-income or price-level target gap? The lessons of the 1970s were painful. However, because of the asymmetries inherent with the ZLB and the ability of the Fed to confidently enact monetary restraint by simply increasing short-term policy rates, I see the overshooting scenario as less likely than a protracted undershooting of target. Achieving our maximum employment and inflation mandates might require some long periods of strong monetary policy accommodation. Is the financial market system and regulatory environment robust enough to limit financial instability risks in such circumstances? Can the Fed conduct an effective and independent monetary policy strategy irrespective of the state of financial markets and regulatory policies? Financial stability is an important goal of the Federal Reserve. Indeed, the Fed was established to provide an elastic currency that supports credit intermediation. As we were all too aware during the crisis, a breakdown in financial intermediation can have severe consequences for the real economy. So we must ask if some alternative monetary policy frameworks might be more or less prone to generating financial instability risks. An important channel through which any accommodative monetary policy works is to increase incentives for prudent risk-taking, particularly with respect to physical capital investment opportunities. Lower-for-longer interest rates or policies aimed at reducing term premiums also incentivize financial risk-taking.

## Chapter 8 : Project MUSE - Vermeer and the Camera Obscura: Some Practical Considerations

*This is the second of two articles focusing on the reference interval, the most widely used tool for interpretation of patient test results. The first [1] was an introduction to the theoretical concepts that underpin the significance, construction and use of reference intervals. Here consideration is given to the more pract.*

Fraud Forgery using a name that is not yours to use! We are discussing the Social Order. That means interactions between humans, not within a person himself. In other words, we have written extensively about how an individual person can come closer to God. But that is not our point here, and that is not a proper basis of social interaction, nor a basis for civil government. I am not talking about the morality of it. That is not the point here. But as a voluntary, non-coercive contract between 2 people, it does not violate the Natural Law, and therefore should not be illegal. In fact, there has been endless research done proving that the very illegality of it creates an atmosphere which leads to the very abuses the law tries to protect. But the truth is that 1 the illegality of prostitution cannot be justified through application of the Natural, and 2 Societies where it is decriminalized have much lower rates of rape and child abuse than in the U. Sorry, but that is the truth. And at this point we will "leave the rest of the exercise to the reader. The key point here is, should you be willing to accept The Natural Law as the basis for civil government, it can quite logically and consistently be applied to your understanding of our world. Obviously neither America nor any other part of this civilization we are familiar with accepts it, and we are under no delusion that anything will change any time in the foreseeable future. But that does not negate its truth or value. Is The Natural Law sufficient? Would that be enough? But 2 wrongs do not make a right, and making an immoral act illegal simply because it makes some of us uncomfortable is no basis for a system of government. But once you start down that road, wherein our personal morality is forced upon other people, it becomes quite easy to start the Crusades again. We can and must eventually begin to do better than that. And re-creating our governments on the shoulders of an absolute application of The Natural Law is the first step.

## Chapter 9 : Legal professional privilege: some practical considerations

*Recovery and Resolution Planning: Some Practical Considerations A joint discussion on the key elements of the RRP process and some of its more difficult challenges.*